




# **Monthly Digest of Statistics**

**Supplement**

**Definitions and  
Explanatory Notes  
1991 Edition**



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# **Monthly Digest of Statistics**

**1991 Annual  
Supplement**

**Definitions and Explanatory Notes**

**Editor: DAVID J. SHARP**

CENTRAL STATISTICAL OFFICE

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## INTRODUCTION

This *Supplement* gives definitions of items and units employed in the *Monthly Digest of Statistics* in more detail than is possible in the headings and footnotes of the tables in the publication itself.

This issue replaces that published with the February 1990 edition of the *Monthly Digest of Statistics*.

The definitions relate to the tables as they appear in issue No. 541 of the *Monthly Digest* for January 1991. If further new series are added or changes are made in the content before the next issue of this *Supplement*, additional definitions will be given where necessary in the footnotes to the tables in the *Digest*.

The definitions in the *Supplement* also apply to corresponding items in the *Annual Abstract of Statistics* and *Regional Trends* prepared by the Central Statistical Office and published by HMSO.

When annual figures such as appear in the *Monthly Digest* are given in greater detail in the *Annual Abstract*, the additional explanatory notes are shown in the *Annual Abstract*.

Weekly averages are used in the *Digest* where the basic figures are collected on a weekly basis, and also in a few cases, indicated by footnotes, where the basic figures are for calendar months. Where weekly averages are given for months they represent the totals of four-week or five-week periods divided by four or five respectively. The average of a five-week period is indicated by an asterisk throughout the *Digest*.

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January 1991

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# Monthly Digest of Statistics

## 1. NATIONAL INCOME AND EXPENDITURE

This section brings up to date the estimates for calendar years given in *United Kingdom National Accounts*, 1990 Edition, HMSO 1990 (the CSO Blue Book), and the quarterly estimates given in *Economic Trends*, October 1990. A brief explanation of the main concepts used in the UK national accounts, of the main principles of measurement adopted, and of relationships between the main aggregates, as well as between whole-economy aggregates and sectoral measures, is given in the Introduction to the Blue Book. A detailed description of the sources, methods and definitions used is given in *United Kingdom National Accounts: Sources and Methods*, Third Edition (Studies in Official Statistics No. 37), HMSO 1985; this is brought up to date each year in the Blue Book methodological notes.

Each table has a section giving seasonally adjusted estimates to assist in the interpretation of the original unadjusted estimates.

### Gross domestic product

Gross domestic product (GDP) is the total of all economic activity taking place on the UK territory (no matter who owns the economically-productive assets) before providing for depreciation (that is, for capital consumption). It is measured in three largely independent ways: as the total of all **output**, production or value-added by all activities which produce goods and services; as the total of all **incomes** earned from producing goods and services; and as the total of all **expenditures** made either in consuming the finished goods and services or in adding to wealth (*less* expenditure on imports). The difference between estimates using the income-based measure, GDP(I), and estimates using the expenditure-based measure, GDP(E), the 'residual error', arises from the limitations of the many administrative and statistical data sources used, including timing differences, errors and omissions, and sampling errors. Residual error is, by convention, given in the form 'GDP(E) less GDP(I)' but this does not imply that either estimate is superior in accuracy. For comparisons over periods of a year or more and for levels, the definitive estimate is the **average** estimate of gross domestic product, GDP(A). This is the unweighted arithmetic average of GDP(E), GDP(I) and GDP(O), for years since 1985. In earlier years, its calculation includes, from the 1988 Blue Book a refinement which is explained in the October 1988 issue of *Economic Trends*. The output-based measure of gross domestic product, GDP(O), discussed below, is generally held to be the best indicator of short-term movements in levels of economic activity.

Gross national product is the total of all economic activity by assets owned by UK residents (no matter where these assets may be located) before providing for depreciation. Gross national product equals gross domestic product *plus* net receipts from interest, profits and dividends earned abroad.

Caution should be exercised when drawing conclusions from quarterly data on changes in the pattern of expenditure and the relations between expenditure, income and output. Inconsistencies arising from the different methods of measurement are bound to be relatively larger for periods of *less* than one year than for complete years.

### Index numbers of output at constant factor cost

The output-based estimate of gross domestic product, GDP(O), is calculated by combining indices of the output of individual

industries and services valued at the prices of a base year, with weights proportional to the contribution of each industry to gross domestic product in that year. The estimates in Table 1.4 are produced only on a quarterly, seasonally adjusted basis, except for production industries which is available monthly, unadjusted and seasonally adjusted.

Detailed methodology is given in Chapter 5 of *United Kingdom National Accounts: Sources and Methods*, Third Edition (HMSO 1985). Lists of the series used to compile the 1980-based estimates of GDP(O) are included in an Occasional Paper (No 20), available from CSO C3, Room 132E/2, Central Statistical Office, price £10.00 (cash with order). An updated version of this paper, to reflect the 1985-based series and weights, is now available. For production industries, Occasional Paper (No 22) describes the weights, indicators and sources for each series used to compile the 1985-based index and is available from CSO C3, Room 131/2, Central Statistical Office at a cost of £10 (cash with order please). A consequence of the Review of Department of Trade and Industry Statistics (see section 7) is that much of the source material in the paper is now out of date; an updated version will be published in due course. The 1985-based estimates of output in Tables 1.4, 7.1 and 7.2 are classified according to the industrial analysis shown in the *Standard Industrial Classification Revised 1980* (HMSO 1979).

### Personal income, expenditure and saving

The personal sector includes unincorporated enterprises, life assurance and superannuation schemes and non-profit-making bodies serving persons. Income is shown before tax and before providing for depreciation and stock appreciation. The item Personal saving before providing for depreciation, stock appreciation and additions to tax reserves, is obtained as a residual and is subject to a wide margin of error.

### Consumers' expenditure

Consumers' expenditure covers all personal expenditure on goods (durable and non-durable) and services, including the value of income in kind, imputed rents for owner-occupied dwellings, administrative costs of life assurance and superannuation schemes and the purchase of second-hand goods *less* the proceeds of sales of used goods. It also includes final expenditure on goods and services for current use by private, non-profit-making bodies serving persons.

The following are not included: all business expenditure and expenses; interest and other transfer payments; improvements to dwellings and the purchase of land and dwellings (and associated costs). These last two items are treated as capital expenditure.

The classification of consumers' expenditure is fully described in *United Kingdom National Accounts: Sources and Methods* published in 1985. The component categories shown in *Monthly Digest of Statistics* correspond to the commodity classification in Tables 4.5 and 4.6 of *United Kingdom National Accounts 1990 Edition*.

### Value of physical increase in stocks and work in progress

The quarterly estimates for manufacturing, wholesaling and retailing are based on information about the book value of stocks supplied by a sample of companies to the

Business Statistics Office. The figures for manufacturing are based on returns from a panel of companies covering about half of total manufacturers' stocks and including most of the larger companies, but those for wholesaling and retailing have a narrower coverage. The figures for the latest complete year and succeeding quarters are based at first on the quarterly inquiry but are revised in the light of the results of the censuses of production and the annual inquiries into the distributive and service industries when these become available.

Detailed annual figures of stock changes are published in *United Kingdom National Accounts 1990* edition.

The figures are described in detail in Chapter 13 of *United Kingdom National Accounts: Sources and Methods*, Third Edition (HMSO 1985).

### **Gross domestic fixed capital formation**

This comprises expenditure on fixed assets, including their replacement and additions to existing fixed assets; expenditure on maintenance and repairs is excluded. Fixed assets include dwellings, other new buildings and works, vehicles, plant, machinery and other equipment. A further category of fixed asset is land and existing buildings, transactions in which, except for actual costs of transfer, net out to zero when aggregated across the economy as a whole. Transactions in land and existing buildings are included in the sectoral analyses of capital formation but are excluded from the industrial analyses.

The acquisition of fixed assets is normally recorded at the time the expenditure takes place. However some assets which are imported are recorded at the time of delivery. These assets include ships and aircraft and assets acquired by the extraction of mineral oil and natural gas industry.

Estimates of total fixed capital formation and the industrial analyses of that total, have traditionally been compiled using data collected from various quarterly and annual surveys of business expenditure. Recent studies of the apparent shortfall of the quarterly enquiry based estimates, when compared with estimates of the supply of capital goods based on production and trade data, have shown up problems with some of the results from the expenditure enquiries. The published estimate of total fixed capital formation for the years 1988 and 1989 take due account of the available estimates of the supply of capital goods to the domestic market.

No comprehensive industrial analysis of the supply of capital goods is available. Therefore only a very limited range of industrial estimates for the year 1989 can be published at the moment. The annual benchmark expenditure enquiries for 1989, the results from which will be available in the summer of 1991, are expected to help considerably in the compilation of a fuller range of industrial estimates.

More detailed annual figures of gross capital formation are published in *United Kingdom National Accounts 1990* Edition.

The figures are described in detail in Chapter 12 of *United Kingdom National Accounts: Sources and Methods*, Third Edition (HMSO 1985).

### **Fixed capital expenditure in the manufacturing, distributive and service industries**

The quarterly estimates are based on information supplied to the Central Statistical Office by panels of companies which account for about one half of the capital expenditure of the manufacturing

industries and about one third in the case of the distributive and service industries. The figures for the latest complete year and succeeding quarters are based at first on the quarterly inquiry, adjusted where necessary to take account of information of the supply of capital goods, but are revised in the light of the censuses of production, in the case of manufacturing industry, and the annual inquiries for the distributive and service industries when these become available. From the first quarter of 1991 these quarterly estimates will be based on the results of a new statutory inquiry with a much larger sample size than the present voluntary panel.

The quarterly figures at current values are revalued at constant 1985 prices and are then seasonally adjusted. The figures for plant and machinery and for vehicles are net of receipts from sales of such assets. From 1988, a need to supplement the survey-based estimates has been shown by studies of their apparent shortfall when compared with estimates of the supply of capital goods based on production and trade data. Accordingly the estimates from 1988 take due account of the available estimates of the supply of capital goods to the domestic market.

No comprehensive industrial analysis of the supply of capital goods is available, so the analysis of fixed capital formation by industry relies on broad assessments of the quality of the available survey estimates. In Table 1.10, the survey-based estimates for 1988 have been so adjusted for: Banking, insurance and other finance; and Business services, etc.

For 1989 and 1990, estimates have been compiled using the same approach as for 1988. However, the results of the annual benchmark surveys of business expenditure for 1989 are not available to help the industrial analysis. In their absence, it has been decided that only the limited range of industrial estimates shown in Tables 1.9 and 1.10 can be shown for the moment. Once the annual survey results for 1989 are available in the summer of 1991, they are expected to help considerably in compiling a fuller range of industrial estimates.

Annual figures (by asset) at current prices are available from *United Kingdom National Accounts 1990* Edition at a more detailed level.

## **2. POPULATION AND VITAL STATISTICS**

### **Definition of resident population**

The estimated population of an area includes all those usually resident in the area, whatever their nationality; members of HM and non-UK armed forces stationed in the area are included but those stationed outside are not. Students are taken to be resident at their term-time address.

The estimates are updated annually by allowing for births, deaths and migration for each area; these estimates started with those derived from the 1981 Census of Population.

### **Projected population**

Projections of the population of the United Kingdom last appeared as a Supplementary Table in the August 1980 issue of the *Digest*. Since then these projections have been updated several times. The most recent set are 1988-based. Summary results for England and Wales were published in OPCS Monitor PP2 89/2.

Corresponding details for the mid-1981 based projections appeared in *Population Projections*, Microfiche PP2 No.12 1981-2021 (HMSO 1984).



Summary results of the projected population of England and Wales based on the estimates of the population at mid-1983 were published in OPCS Monitor PP2 84/1 (OPCS 1984).

Population projections mid-1983 based for the United Kingdom (and its constituent counties) for the period 1983-2023 were published in OPCS series PP2 No. 13 (HMSO 1985).

Variant population projections mid-1983 based for the United Kingdom (and selected constituent counties) for the period 1983-2023 were published in OPCS series PP2 No. 14 (HMSO 1986).

Population projections mid-1985 based for the United Kingdom (and its constituent counties) for the period 1985-2025 were published in OPCS series PP2 No. 15 (HMSO 1987). This volume also includes variant population projections.

### **Births, marriages and deaths**

Births for England and Wales relate to occurrences in a period, while those for Scotland and Northern Ireland relate to births registered in a period. Marriages and deaths are those registered in the country during the periods shown.

The number of births registered in a period differs somewhat from the actual number which occur in that period because of the varying time-lag between a birth and its registration.

Deaths include those of members of the armed forces in the United Kingdom but exclude any which occur abroad.

Stillbirths are excluded throughout.

## **3. EMPLOYMENT**

### **Employees in employment**

Comprehensive statistics of employees in employment for June dates from 1971 to 1978 and for September 1981, September 1984 and September 1987 are obtained from the Census of Employment. Quarterly figures from September 1977 (monthly for manufacturing from October 1981) have been obtained by interpolating and extrapolating census estimates using proportionate changes in employment derived from sample surveys. These estimates are analysed by the *Standard Industrial Classification Revised 1980*.

The estimates after September 1987 include allowances for underestimation which have been derived using results from the annual Labour Force Surveys. Revisions will be made to estimates for periods after September 1987 when the results of the 1990 Labour Force Survey and the 1989 Census of Employment become available.

Estimates of employees in employment were previously obtained from a count of National Insurance cards. A card count was held alongside the Census of Employment in 1971 to provide a link between the two series.

### **Self-employed**

Benchmark estimates for the self-employed are derived from the Census of Population and these have been updated since the 1981 census by applying proportionate changes in self-employment reported in the Labour Force Survey. Estimates have been prepared in this way biennially from 1975 to 1983, and annually since 1984.

Quarterly estimates of self-employed for the whole economy are obtained by linear interpolation. For quarters after June 1989 it is assumed that the average rate of increase shown between the 1981 Census of Population and the 1989 Labour Force Survey is continuing. These estimates will be revised when the results of the 1990 Labour Force Survey become available.

### **Workforce**

The workforce comprises the following five components:

- (i) employees in employment — a count of civilian jobs, both main and secondary, as an employee paid by all employers who run a PAYE scheme. Participants in government employment and training programmes are included if they have a contract of employment. HM Forces, homeworkers and private domestic servants are excluded;
- (ii) self-employed persons — those who in their main employment work on their own account, whether or not they have any employees. Second occupations classified as self-employed are not included;
- (iii) HM Forces;
- (iv) participants in work-related government training programmes — those participants on government programmes who in the course of their participation receive training in the context of a workplace but are not employees, self-employed or HM Forces;
- (v) claimants for unemployment benefit, income support or national insurance credits at unemployment offices.

The workforce definition is explained in more detail on page S6 of the August 1988 edition of *Employment Gazette*.

### **Employees in employment**

#### **Manufacturing industries**

Monthly figures for Great Britain are obtained by interpolating and extrapolating the results of the Census of Employment using proportionate changes in the numbers employed, derived from the returns rendered by a sample of employers under the Statistics of Trade Act, 1947. For Northern Ireland, figures are only available quarterly.

#### **Non-manufacturing industries**

Quarterly estimates for Great Britain are obtained in a similar manner to those for manufacturing industries, but based partly on a sample of employers and partly on returns rendered by centralised organisations in both the public and private sectors. Each centralised return identifies a substantial number of employees in an industry.

### **Staff employed in the Civil Service**

The table sets out departmental totals by ministerial responsibility of UK-based staff in the Home Civil Service and the Diplomatic Service (but not the Northern Ireland Civil Service, the Northern Ireland Court Service and the Overseas Civil Service).

A civil servant is a servant of the Crown working in a civil capacity who is not the holder of a political (or judicial) office; nor the holder of certain other offices in respect of whose tenure of office special provision has been made; nor a servant of the Crown in a personal capacity paid from the Civil List. Staff who are locally engaged and overseas, employees of grant aided bodies are excluded. More comprehensive definitions and detailed figures are published annually in *Civil Service Statistics*.

The figures include non-industrial and industrial staff but exclude casual or seasonal staff (normally recruited for a short period only and not more than 12 months). Part-time employees are counted as half units.

**EMPLOYMENT** - Includes Department of Employment and Training Agency; Health and Safety Executive; Advisory, Conciliation and Arbitration Service.

**SCOTLAND** - These are Departments of the Secretary of State for Scotland and the Lord Advocate.

**WALES** - Welsh Office.

### **Machinery of Government changes prior to 1 April 1983**

The responsibility for the Paymaster General's Office transferred from the Chancellor of the Exchequer's departments to other civil departments on 1 April 1981 (448 staff).

Work on efficiency and personnel management was transferred to the newly formed Management and Personnel Office (MPO) with 1,378 staff from the Civil Service Department on its closure. Certain other divisions from the CSD were transferred to the Treasury and responsibility for CISCO, HMSO, COI and the Government Actuary's Department were transferred to the Chancellor of the Exchequer (9,873 staff in all) on 2 December 1981.

From 1 October 1980, certain staff in PSA (1,276 involved) have been excluded from the Manpower count.

With effect from 1 April 1981, some 765 non-industrial environment, transport and common services staff employed on work for the Department of Transport and previously counted in the Department of the Environment were instead included in the former's figures.

### **UK Service personnel - intake, outflow and strengths**

The table sets out figures for the total intake, the total outflow and the strengths of UK Service personnel of the Regular Forces. These personnel are normally recruited in the United Kingdom for whole-time service throughout the world. The figures exclude all reserve personnel, the Territorial Army, the Ulster Defence Regiment and personnel, such as Gurkha troops, who are recruited locally outside the United Kingdom.

The numbers for males include male members of the Queen Alexandra's Royal Naval Nursing Service and the Princess Mary's Royal Air Force Nursing Service. Also, for administrative reasons, the male numbers include professionally qualified females (currently about 250) serving as medical, dental, veterinary and legal officers, who are not commissioned in the Women's Services. The numbers for females comprise the Women's Services and female members of the Nursing Services.

The figures of intake comprise all entrants from civilian life, including those with previous service in the armed forces and entrants for commissioned service who had not, at the time of entry, been finally selected for officer training. The figures of outflow include personnel who leave for all reasons whether voluntarily or for other reasons such as completion of engagement. Some of these personnel will have a liability to serve in the Reserve Forces. The figures of strengths include personnel who are on loan to other UK government departments or commercial undertakings or to the armed forces of other countries; personnel who are serving on an exchange basis with members of the armed forces of other countries; and personnel serving in United Nations or North Atlantic Treaty Organisation appointments or forces.

### **Local authority staffing**

In March 1975, a quarterly employment series was launched jointly by central government and the local authority associations of England and Wales for the purposes of a Joint Manpower Watch, now renamed the Joint Staffing Watch. The figures for this series are compiled by the Local Authorities Conditions of Service Advisory Board (LACSAB). Quarterly figures for England and Wales were published for the first time in the November 1976 *Monthly Digest of Statistics* and these were joined by figures for Scotland starting with the August 1977 issue. Separate figures for England, Wales and Scotland now appear in each issue of the *Digest*, updated at quarterly intervals. The series covers total employment in all the services for which local authorities are responsible, except those employees whose cost is directly reimbursed by central government, e.g. those employed under the Youth Training Scheme. For the purpose of converting part-time staff numbers to 'full-time equivalents' the following factors have been used: teachers and lecturers in further education 0.11, - teachers in primary and secondary education and all other non-manual employees 0.53, manual employees 0.41. These factors derive mainly from an analysis of hours worked by local authority employees as reported for the New Earnings Survey 1974. Further analyses of the quarterly series for all Joint Staffing Watch categories appeared for the first time in the *Department of Employment Gazette*, now *Employment Gazette*, for November 1976 and these are also updated at quarterly intervals. Figures for Wales alone appear in *Welsh Local Government Financial Statistics*, an annual Welsh Office publication which first appeared in September 1977. Figures also appear in *Local Government Financial Statistics, England*, published annually.

### **Numbers of workers employed in agriculture**

The table shows the number of persons doing agricultural work on main agricultural holdings on the day of the census (this includes drainage, hedging and ditching, maintenance and repair work and the marketing of produce grown), together with managerial, supervisory and office staff and workers on minor holdings in England and Wales and also estimated figures for Scotland. The figures do not include farmers, partners and directors and their wives, workmen engaged in building or installing plant, gardeners, groundsmen, gamekeepers, grooms or similar estate workers, domestic staff employed in the farmhouse, schoolchildren or young workers engaged as trainees under the Youth Training Scheme. The figures for salaried managers are for Great Britain only.

Seasonal or casual workers are workers, family and hired, who are not regular workers but are working on the holding on the census date and include those supplied temporarily by agricultural contractors or gangmasters.

### **Overtime and short-time in manufacturing industries**

Monthly statistics on overtime and short-time relate to operatives employed in manufacturing industries and therefore do not include administrative, technical and clerical workers. They are obtained from questions included in the monthly survey used to obtain estimates of the numbers of employees in manufacturing industries.

### **Unemployment**

The current figures for the United Kingdom, Great Britain and standard regions, relate to people claiming benefit (that is unemployment benefit, income support or national insurance credits) at Unemployment Benefit Offices on the day of the monthly count, who on that day were signed on as unemployed and satisfied the conditions for claims benefit. Students claiming benefit during

a vacation, but who intend to return to full-time education, and temporarily stopped workers are excluded.

The number of unemployed people in Northern Ireland is shown in the general and regional tables.

### Seasonally adjusted unemployment statistics

The seasonally adjusted series of unemployment figures is adjusted to allow for discontinuities in coverage. In effect the series takes the current coverage and estimates the position as if that coverage had been in force since 1971. The seasonally adjusted unemployment figures which relate to unemployed claimants aged 18 and over have been revised, in order to maintain the consistent series, allowing for the effect of the changes in the conditions of the Redundant Mineworkers Payment Scheme, effective from July 1989. Since July 1989 redundant mineworkers have had the option to no longer sign on at Unemployment Benefit Offices as unemployed in order to receive their scheme benefits. (See the December 1990 issue of the *Employment Gazette* for further details.)

### Vacancies unfilled

The vacancy figures shown in Table 3.13 do not represent all the vacancies in the economy but only those vacancies notified to Jobcentres (including 'self-employed' opportunities created by employers) and Careers Offices and remaining unfilled on the day of the count. Nationally it is estimated that about a third of all vacancies are notified to Jobcentres.

Vacancies notified to Jobcentres are mainly for adults but include some that are suitable for young persons, while vacancies notified to Careers Offices are suitable for young persons but include some that are suitable for adults. Because of possible duplication the two series should not be added.

For Northern Ireland the table shows unfilled vacancies notified to the local offices of the Northern Ireland Department of Economic Development.

### Industrial stoppages

#### Definition of stoppages

The statistics relate to stoppages of work in the United Kingdom due to industrial disputes between employers and workers, or between workers and other workers, connected with terms and conditions of employment.

Disputes which do not result in a stoppage of work, for example, work to rules and go slows, are not included in the statistics, as their effects are not quantifiable to any degree of certainty. Stoppages involving fewer than 10 workers or lasting less than one day are excluded from the statistics unless the total number of working days lost in a dispute is greater than 100.

Stoppages over issues not directly linked to terms and conditions are excluded from the statistics though in most years this is not significant. For example, in 1986 one stoppage (a protest in the coal industry against the visit of an MP) was excluded on these grounds and the total working days lost amounted to less than 1,000. There were no such stoppages excluded from the statistics in respect of 1987, 1988 or 1989.

The statistics include 'lock-outs' (that is, where the employer prevents his employees from working by locking the place of work) and 'unlawful' strikes. However, no distinction is made between a 'strike' and 'lock-out' or between 'lawful' and 'unlawful'

stoppages, principally because of the practical difficulty of determining the category a particular stoppage falls into. It is for a similar reason that the 'official/unofficial' distinction is no longer made after 1981.

#### Working days lost

In measuring the number of working days lost, account is taken only of the time lost in the basic working week. Overtime work is not included, and neither is weekend working where it is regular practice. Where an establishment is open every day and operates two or more four or five shifts, the statistics will record the number of working days lost for each shift. In recording the number of days lost, allowance is made for public and known annual holidays, for example, factory fortnights, occurring within the strike's duration.

Allowance is not normally made for absence from work for other reasons as sickness and unauthorised leave, unless this information is readily available. Where strikes last less than the basic working day, the hours lost are converted to full day equivalents, as are days lost by part-time workers. The number of working days lost in a stoppage reflects the actual number of workers involved at each point in the stoppage. This is in general less than the number obtained by multiplying the duration of the stoppage by the number of workers involved at any time during the stoppage because some workers would not have been involved throughout.

In disputes where an employer dismisses his employees and subsequently reinstates them, the working days lost figure includes days lost by workers during the period of dismissal. Disputes where an employer dismisses his employees and replaces them with another workforce can present particular difficulties as the statistics cannot assume that working days are being lost by the same workers indefinitely. In such cases the statistics measure the number of days lost in terms of the size of the replacement workforce: for example, where an employer initially recruits 100 and wishes to build up a total workforce of 300, the number of working days lost on day one will be recorded as 200 and will be reduced on subsequent days, eventually to zero when the new workforce total of 300 has been achieved.

#### Number of Stoppages

There are difficulties in ensuring complete recording of stoppages in particular for short disputes lasting only a day or so or involving only a few workers. Because of this recording difficulty and the cut off applied in the recording process, the number of working days lost is considered to be a better indicator of the impact of industrial disputes than the simple number of recorded stoppages.

#### Workers involved

The figures for workers involved relate to persons both directly and indirectly involved at the establishments where the dispute occurred with part-timers included as whole units. Workers indirectly involved are those who are not themselves parties to the dispute but are unable to work as a result of the dispute. The figures for the indirectly affected exclude workers laid off at sites other than where the dispute occurred, for example, due to shortage of materials, or temporary lack of demand. This is partly because of the difficulty in deciding to what extent a particular firm's difficulties are due to the effects of a strike elsewhere or some other cause. Workers involved in more than one stoppage during a year will be included in the statistics for each stoppage in which they participated.



statistics attempt to record the numbers of all workers involved any time in the stoppage. For example, if, in a three day strike there were 200 workers involved on day one, 300 workers on day two, and 100 on day three, then the number of workers involved at any time in the dispute is 350, the sum of those involved on the first day, and those joining for the first time on subsequent days. However, the number of workers joining industrial action for the first time cannot always be easily ascertained and in such cases the statistics record the maximum number of workers involved at any one time (300 in the above example). Taking another example, where there are 200 workers involved in the stoppage on days one, two, and three, it may be necessary to assume that a total of 200 workers are involved in the stoppage at any one time, although it is possible, however unlikely, that as many as 600 workers could have been involved. For this reason, the number of workers involved in a dispute may be under recorded. However, the estimate of the number of working days lost will, of course, be unaffected by this consideration.

A more detailed analysis of stoppages caused by industrial disputes in 1989 can be seen on pages 336-346 in the July 1990 edition of the *Employment Gazette*.

## **SOCIAL SERVICES**

### **Statutory sick pay, sickness insurance and child benefit**

#### **Sickness and invalidity benefit**

The payment of these benefits is authorised under the Social Security Acts. They are payable to claimants who are incapable of work through illness or injury.

From 1983 most short-term illnesses were covered by the rules governing claims to sickness benefit. However the Statutory Sick Pay scheme (SSP) was introduced from 6 April 1983, covering the first 8 weeks sickness absence in a tax year. From 6 April 1986 SSP was extended to cover the first 28 weeks in any period of incapacity. SSP is paid by the employer, often as part of an Occupational Sick Pay scheme, then reclaimed from the Government. SSP claims are not included in the figures for sickness and invalidity benefit.

Both sickness benefit and SSP are not generally paid for absences of three days or less, or for the first 3 days of a longer absence.

Certain groups of people are not covered by the SSP scheme e.g. the self-employed, the unemployed or employees with short-term contracts. Other persons may lose their entitlement to SSP during sickness absence, e.g. if their contract of service ends. In these cases the person may be entitled to sickness benefit.

To receive sickness benefit (SB) or later invalidity benefit you must normally have paid enough Class 1 or 2 NI contributions in a given period. When a person is incapable of work because of an industrial accident or prescribed disease, the contribution conditions for sickness benefit are treated as satisfied.

The number of new claims is measured by the number of first employers' statements and self certificates, received by the local offices of the Department of Social Security. Cases where a certificate is received but sickness benefit is not payable are included in the statistics as they indicate incapacity for work.

A claimant who has received SSP and/or sickness benefit for 28

weeks may then move onto invalidity benefit (IVB), which is paid at a higher rate. Normally the benefit can remain in payment until the person reaches retirement age with special circumstances relating to those who opt to continue to receive it up to 5 years after retirement age. Cases passing from SSP to IVB are recorded in the claims figures, but those passing from SB to IVB are not counted a second time.

Those who are long-term sick and do not qualify for IVB may be entitled to Severe Disablement Allowance (SDA). Cases receiving SDA are not counted in the figures for sickness and invalidity benefit.

#### **Unemployment benefit**

This is payable to the unemployed who are capable of and available for employment provided they have paid, or been credited with sufficient Class 1 N.I. contributions in the relevant tax year. From October 1988, entitlement to unemployment benefit depends on the payment or crediting of contributions in the two tax years before the start of the benefit year rather than in the preceding year only. Entitlement lasts up to 12 months in any period of interruption of employment. Self-employed persons and married women paying reduced rate contributions cannot normally qualify for benefit.

#### **Retirement pensions**

Retirement pensions, as the name implies, are payable on retirement from regular work provided the minimum age (65 for men, 60 for women) has been reached and the necessary contribution conditions are satisfied. From age 70 (65 for women) the retirement condition no longer applies.

A married woman, who does not qualify or only partially qualifies for a pension in her own right, can receive a pension through her husband's insurance provided that the retirement and age conditions are satisfied by both.

#### **Widows' pensions and widowed mothers' allowances**

These are payable, subject to certain conditions, from the date of widowhood. A widow's pension continues, unless the widow remarries, until she reaches the age of 65 or, after the age of 60, notifies retirement from work, when it is replaced by a retirement pension. A widowed mother's allowance continues generally speaking so long as a widow has at least one qualifying child of school age.

#### **Child benefit**

Child benefit is normally paid up to the age of 16. Thereafter, benefit may be paid up to age 19 if the child is receiving full-time non-advanced (i.e. up to A level standard) education by attendance at a recognised educational establishment. From 12 September 1988, Child benefit can also continue to be paid for a short period where a 16 or 17 year old young person has just left school, and is registered for work or the Youth Training Scheme.

#### **Family Credit**

Family credit is payable to families with one or more children where at least one parent is normally in full-time work (24 hours a week minimum) but the income of the family is low. Family credit was introduced on April 1988 and replaced Family Income Supplement.



### **Income Support payable under the Social Security Act 1986** (as amended by the Social Security Act 1988)

A person in Great Britain aged 18 or over (or, in prescribed circumstances, aged 16 or 17) who has left school and whose income is below their applicable amount as defined in the Social Security Act 1986, as amended, and the Income Support Regulations, may be entitled to Income Support, which is designed to bring their income up to a minimum level set by Parliament. However, Income Support is not payable where the claimant, or their partner, works for 24 hours or more a week (with certain exceptions) or where their capital exceeds £6,000.

### **National Health: hospital services**

The figures are taken from returns made by authorities responsible for hospitals to the Department of Health, the Welsh Office and the Information Services Division of the Common Services Agency, Scottish Health Service. Annual data for Scotland refer to the year ending 30 September.

#### **Average daily available beds**

The figures are obtained by taking the total of the daily numbers of staffed beds available (at the night count) and dividing by the number of days in the year. In Scotland, the figures shown represent the average allocated staffed beds over the period. (For six months ending March and September.)

#### **Occupation of beds**

The figures are obtained by taking the total of the daily numbers of in-patients for the year (at the night count) and dividing by the number of days in the year. In-patients, for this purpose, are persons (other than day-cases) who have gone through the full admission procedure of the hospital and occupy a bed in the in-patient department.

#### **Discharges and deaths**

The figures shown include all patients who have gone through the full in-patient procedure and who have subsequently been discharged or have died. Scottish figures in this publication differ from those Scottish figures published elsewhere because of the exclusion of transfers out.

#### **Waiting list**

All patients listed as awaiting admission to hospital for in-patient treatment are included under this heading with the following exceptions:

- a. expectant mothers booked for confinement;
- b. deferred admission cases;
- c. transfer cases, i.e. patients already occupying beds in hospital and awaiting transfer to another department or hospital;
- d. day cases.

#### **Out-patient attendances**

For England prior to 1 April 1987, new out-patient attendances were first attendances at an individual hospital for a continuous series of treatment, but are now first attendances within the District when the attendance has not been initiated by the consultant or one of his staff. Patients attending solely for attention of a minor nature and not seen by a doctor, eg to have a dressing changed, are no longer counted.

#### **Day case attendances**

For England and prior to 1 April 1987, a day case was defined as a person who comes for investigation, treatment or operation,

under clinical supervision, on a planned non-resident basis and who occupies a bed. The definition has now been clarified and reads, 'patients admitted electively to a hospital bed during the course of a day with the intention of receiving care or treatment which can be completed in a few hours'. In both cases, if a patient cannot be discharged on the day of admission, they are classified as an in-patient instead.

### **National Health: family health services**

Family health services (formerly known as family practitioner services) are those services provided by family doctors, dentists, community pharmacists and opticians to the NHS under Part II of the National Health Service Act 1977.

Services were originally administered by the 134 Executive Councils of England and Wales set up under the National Health Service Act 1946 and by 25 similar councils in Scotland set up under the National Health Service (Scotland) Act 1947. From 1 April 1974, family health services in England and Wales were administered by 98 Family Practitioner Committees (FPCs) set up under the National Health Service Reorganisation Act 1973 (and later the National Health Service Act 1977). The Health and Social Security Act 1984 established FPCs as free standing authorities in 1985. In September 1990, under the National Health Service and Community Care Act 1990, FPCs in England and Wales were reconstituted as Family Health Services Authorities (FHSAs) with the 90 FHSAs in England becoming accountable to Regional Health Authorities.

Services in Scotland have been administered since April 1974 by 15 Health Boards set up under the National Health Service (Scotland) Act 1972.

The role of FPCs/FHSAs and Health Boards in managing the development of family health services has been significantly enhanced in recent years under the Government's White Papers 'Promoting Better Health', 'Working for Patients' and 'Caring for People'.

#### **Pharmaceutical services**

These figures represent the number of National Health Service prescriptions of drugs, medicines and specified appliances dispensed by retail pharmacies, drug stores and suppliers of surgical appliances in contract with Family Health Services Authorities (England and Wales) or Health Boards (Scotland). Most of the items are supplied on National Health Service prescriptions given by the family doctors, but a small number are given by dentists, at National Health Service hospitals and clinics. Prescriptions which doctors themselves dispense for their patients are excluded.

#### **Dental services**

From 1 October 1990 a dentist in accepting a patient undertakes to provide the care and treatment necessary to secure and maintain oral health (before 1 October 1990, the treatment needed to achieve dental fitness), except for occasional treatment where the treatment is limited to certain items (e.g. the extraction of not more than two permanent teeth or a denture repair). The course is complete when this treatment - or such of it as the patient is willing to undergo - has been carried out. Additionally, from 1 October 1990 dentists will be under a contract and obligation to provide "continuing care" to those of their patients registered with them for capitation (children) or continuing care (adults).

The figures include full courses of treatment and cases of occasional treatment which were scheduled for payment during the period.

### General ophthalmic services

These services provide for the testing of sight and the issue of vouchers to certain eligible patients. The vouchers can be redeemed against the cost of glasses. These services operate in conjunction with the Hospital Eye Service which provides for the diagnosis and treatment of diseases or defects of the eyes and for the supply of optical appliances.

From 1 April 1985 supply of glasses under the GOS was restricted to children under 16, or under 19 in full-time education, patients requiring more complex lenses, and patients claiming remission of charges on the grounds of low income. From 1 July 1986 the provision of glasses under the GOS ceased, and was replaced by a cash voucher which can be exchanged for full or part payment against the cost of private spectacles. People eligible for vouchers are those patients who would have been entitled to GOS dispensings under the old system (as defined above).

From 1 April 1989 GOS sight testing was restricted to those patients who were eligible for vouchers. Additional categories of patients who were also entitled to GOS sight testing are patients who are registered blind or partially sighted, patients who suffer from glaucoma or diabetes and patients aged over 40 who are close relatives of glaucoma sufferers.

## 5. LAW ENFORCEMENT

### Notifiable offences recorded by the police

The term 'notifiable offences' covers those offences for which, if any suspect (not a juvenile) were apprehended, proceeded against at court and found to have a case to answer, he would have to be tried by a jury; it also covers most of those offences for which a defendant could—prior to July 1978—be tried by magistrates in accordance with section 19 of the Magistrates' Courts Act 1952 (i.e. indictable offences triable summarily with the consent of the accused) and certain summary offences (e.g. unauthorised taking of a motor vehicle). Although the title of this series has changed from time to time the types of offence covered have remained largely unaltered. The statistics cover the more serious offences including some offences of attempt. Less serious offences (i.e. most summary offences) are not recorded in such detail by police forces and do not appear in the coverage of 'notifiable offences'. From the beginning of 1983 offences of gross indecency with a child and trafficking in controlled drugs have been included as notifiable offences.

Offences recorded by special forces such as the British Transport Police are not included unless they have been reported to the local police or have come to their attention as a result of court proceedings, where defendants may have asked for the offences to be taken into consideration.

### Crimes and offences recorded by the police (Scotland)

All crimes and offences involve contraventions of the criminal law; the term 'crimes' covers the most serious criminal acts (in many cases, contraventions of Scottish common law) and 'offences' the less serious acts (often contraventions of statutory law). When the police begin investigating an alleged criminal offence, they may have only limited information about it. As investigation proceeds, an incident may turn out not to be criminal and require deletion from the statistics. The assessment of the type of crime involved may change and the incident be allocated to a different category in the classification, both as the result of further investigation or

(for crimes in groups one and two only) following court proceedings against an accused person. Monthly figures come from returns giving the numbers of cases recorded during the month, based on the information available at the end of the month; thus they do not incorporate many of these amendments. Annual figures come from a return giving the number of cases during the year as known at 31 December, thus the majority of cases included will not be subject to any further amendment. In one criminal incident, several crimes or offences may occur, e.g. a house may be broken into and vandalised and the owner assaulted. In these multiple incidents, all the offences are counted rather than one for the incident as a whole; that is, the counting system is offence-based rather than incident-based. Prior to 1 January 1980 the series included crimes and offences reported to the Procurator Fiscal by agencies other than the police, such as the Department of Health and Social Security, in which a prosecution was taken. Since then, these cases are excluded. Offences (mostly parking) which are dealt with by the issue of a fixed penalty ticket are completely excluded from 1 January 1982; prior to this the series included a small number of such cases where the offender failed to pay the ticket and was reported for possible prosecution.

## 6. AGRICULTURE AND FOOD

### Agricultural land

#### Area

For England and Wales, the figures for all years relate to all known agricultural holdings including minor holdings. For Scotland the figures relate to all known agricultural holdings with a labour requirement of 40 standard man days or more (a standard man day (smd) represents eight hours' productive work by an adult worker under average conditions), whilst in Northern Ireland the figures relate to all holdings with one British Size Unit (BSU) or more, or six hectares or more of total area or one or more full-time workers (excluding the owner).

The figures on Table 6.1 include estimates for minor holdings in England and Wales, but not for Scotland and Northern Ireland. Horticultural crops include vegetables grown in the open, small fruit, hardy nursery stock, bulbs and flowers grown in the open and area under glass or plastic covered structures.

Following a change of definition in 1986, 'horticultural crops' now excludes 'peas for harvesting dry for human consumption'. The data from 1984 reflect this change.

The figures for specific crops relate to those which are actually in the ground on the date of the June Census or for which the land is being prepared at that date. Any catch crops grown for livestock feed or for ploughing-in in the period between the harvest and the sowing of the next season's main crop will not be shown in the returns of agricultural area. The case is similar for horticultural crops.

Individual crop areas are returned to the nearest 0.1 hectare and include headlands and ditches attributable to the particular crop. Any crops not specified in the return or grown in patches of less than 0.1 hectare are shown under the heading 'Other crops'.

### Agricultural crops

#### Yield and production

In England and Wales cereal production is estimated from sample surveys held in September, January and April. Production figures on Table 6.2 are rounded to the nearest 10,000 tonnes for wheat

and barley and all other crops to the nearest 1,000. Sugar beet yield and production estimates are provided by British Sugar plc. Potato yield and production estimates are derived from figures provided by the Potato Marketing Board. For remaining crops, yields are estimated by technical officers in the Ministry of Agriculture. These are combined with area figures from the annual June agricultural census to produce production estimates. The Department of Agriculture for Northern Ireland produces all its production figures from the yield estimates of its technical officers. Scottish figures for wheat, barley and oats are based on sample surveys of farms, and other crop production figures are based on the estimated yields of crop reporters. Provisional estimates are prepared for all countries in November and are made on a parish, county or regional basis in England and Wales, by region for Scotland and on a rural district basis in Northern Ireland. Final figures are normally published towards the end of July in the year following the harvest.

## **Horticultural crops**

### **Cropped area and production**

In the case of horticultural crops, production in England and Wales is calculated by multiplying gross yield estimates supplied by Horticultural Crop Intelligence Committees (HCICs) by the appropriate cropped areas. For vegetables and small fruit, the cropped areas are based on one or more of the regular censuses covering horticultural crops and on estimates made by the HCICs. For top fruit, the area is based on the Orchard Fruit Censuses held every five years or so with HCIC estimates for the intervening years.

In Scotland the quantity harvested is calculated for three crops (raspberries, strawberries and tomatoes and peas for processing) by applying harvested yield estimates based on the results of a sample survey to areas returned at one of the two agricultural censuses, after making adjustments where necessary for double cropping. For other fruit and vegetables yield estimates are supplied by technical officers of the department. In Northern Ireland the quantity harvested of all fruit and vegetables is calculated by multiplying yield estimates supplied by technical officers of the Department of Agriculture by the total crop area obtained from the June Census. The working is on a county basis.

In Table 6.2, yields are estimated average gross yields, i.e. the weight of crop that was available for harvesting from each hectare cropped during a single crop year. No deductions are made for the possibility that some of the crop was not harvested or for losses following harvest.

Production is the product of yields and cropped areas. For some vegetable crops, the areas under production may produce more than one crop during a single season and will therefore be greater than the areas measured by the June Census (i.e. Table 6.1) by a factor equalling the number of crops harvested in any given year. Figures represent the maximum available supply during a single crop year, nominally the period 1 June to 31 May, during which the bulk of the crop is harvested.

## **Livestock**

The tables show the number of cattle, sheep, pigs and poultry as returned by occupiers of agricultural holdings defined previously under the heading 'Agricultural land'.

At December, figures relate to sample surveys in England, Wales and Northern Ireland. A sample survey was introduced in Scotland in 1983. Full censuses were held in Scotland up to 1982.

On Table 6.3, 'Barren sows for fattening' in Northern Ireland are included with 'All other pigs'.

## **Disposals of food and animal feedingstuffs**

Disposals are estimated from home production and imports, adjusted for changes in the known stocks held in warehouses, cold stores, etc., by wholesalers, importers, manufacturers and the government; they include deliveries to manufacturers of non-food products, and to exporters except where otherwise defined. As these deliveries are quantitatively important for potatoes, sugar and fish, separate figures of disposals for food in the United Kingdom are also given for these commodities. Disposals for food in the United Kingdom include use in the manufacture of other foods (e.g. sugar in jam, biscuits and sweets), certain disposals to HM Forces, and ingredients used in manufactured products which are exported. Disposals are, therefore, not the same as retail purchases.

## **Cereals and cereal products**

### **Sales of home-grown grains for food**

For wheat the receipts of home-grown supplies by flour millers are shown and small quantities subsequently sold again for animal feed are therefore included. For barley the receipts of home-grown supplies by brewers, maltsters, flakers, roasters, distillers and pot barley manufacturers are shown and exported supplies are included. For oats the receipts by oatmeal millers of home-grown supplies for processing into human food are shown.

### **Wheat and oat milling**

The tables show the quantities of home-produced and imported wheat milled and the amount of flour produced; the resulting production of wheat offals appears in the table of animal feedingstuffs. Stocks of wheat and flour include wheat and flour expressed in terms of wheat held by flour millers, cereal breakfast foods manufacturers, and importers and dealers. Flour disposals include exports.

Only the quantities of oats used in establishments milling primarily for human food are included in the series described as oats milled. The products of oat milling are similarly restricted to all cuts of oatmeal, flakes, rolled oats, oat flour, groats and any other product produced for human food. Stocks of oats are those held by main processors, including oatmeal millers, provender millers and compound feedingstuffs manufacturers. The provender millers' figures relate to Great Britain only. Stocks held by importers and dealers are also included.

### **Barley**

Disposals for food and brewing refer to the quantities of home-grown and imported grain used by brewers, maltsters, flakers, roasters, distillers and pot barley manufacturers. Exports are included. Stocks are those held by main processors, including brewers, maltsters, distillers, provender millers and compound feedingstuffs manufacturers. The provender millers' and compounders' figures are in respect of Great Britain only. Stocks held by importers and dealers are also included.

### **Breakfast cereals**

Figures exclude oatmeal and oatmeal flakes.

### **Biscuits**

The following types are included: chocolate biscuits, fully and partially coated; sweet and semi-sweet biscuits; plain and savoury biscuits; rusks, crispbread, matzos and outcakes; wafers and cones.



### **Compound feedingstuffs**

The figures relate to the United Kingdom; only production for commercial sale is included. Compound feedingstuffs include grain balancers and concentrates.

### **Potatoes**

The figures relate to the United Kingdom; those for Great Britain have been provided by the Potato Marketing Board, and those for Northern Ireland by the Department of Agriculture for Northern Ireland.

Sales of potatoes from farms are the quantities sold for food, for processing and for export; they include an estimate for human consumption in farm households and the surplus potatoes fed to livestock or processed under schemes for implementing the Agriculture Act, 1947. Production on allotments and gardens, potatoes used for seed, potatoes fed to livestock outside the schemes and surpluses for which compensation has been paid, are excluded.

Disposals for food in the United Kingdom are the total quantities of potatoes moving into human consumption from all recorded sources, together with estimates of unrecorded sales. Potatoes processed for export are excluded.

### **Sugar**

Production relates to white and raw sugar (in terms of white) from home-grown sugar beet, within quota as recorded by the British Sugar plc.

Disposals for food in the United Kingdom are adjusted by the net trade sugar contained in processed products. Stocks include imported and home-produced supplies of refined and raw sugar (in terms of refined) held in the United Kingdom, from January 1984.

Backdated figures may differ from those previously published (prior to April 1986) due to a more reliable data coverage which was not previously available.

The total figures for disposals refer to the total UK consumption by food and other industries (including sugar used in manufactured goods), from January 1984.

The disposals for food in the UK refer to the total UK consumption, excluding use by non-food industries.

### **Glucose**

The figures cover the production of liquid and solid glucose and dextrose monohydrate.

### **Jam and marmalade**

The figures show the quantities produced and delivered by manufacturers. From 1975 figures are derived from the Business Statistics Office quarterly inquiries. No figures will be available after Quarter 2 1989 due to discontinuation of this quarterly inquiry.

### **Animals slaughtered, meat produced and meat stocks**

#### **Animals slaughtered**

The figures are those of animals slaughtered in the United Kingdom, including imported fat animals. From July 1954 they are derived from returns recording slaughterings in public and licensed slaughterhouses, including bacon factories. Unrecorded domestic slaughter and slaughter in knackeries are excluded. Slaughterings of poultry are derived through census returns together

with statistics on chick-placings for, and packing-stations throughput of, table poultry.

### **Meat produced**

From July 1954 the figures represent the estimated production of carcase meat (including trimmings from bacon pigs) and offal from slaughterings, as defined in the preceding paragraph, and from information available on dressed carcase weights. Pig meat used for the production of bacon and ham is excluded.

### **Poultry meat**

Estimates of production are on the basis of dressed carcase weights (oven ready).

### **Bacon and ham**

Production figures relate to the output of curing factories from both home-killed and imported carcasses; production by pig clubs or other domestic producers is excluded.

Disposals include supplies of home-produced or imported bacon and ham moving into consumption and also such supplies as are used for canning in the United Kingdom. They do not include any imported canned bacon and ham.

### **Canned meat**

Figures of production relate to all types of canned and bottled meat and meat products. Meat extracts and essences, soups and pastes are, however, excluded.

From 1975 figures are derived from the Business Statistics Office quarterly inquiries.

### **Meat stocks**

Beef and Veal, Mutton and Lamb, Pork, Bacon and Ham.

The figures represent the stocks of meat from home-produced and imported sources held in cold stores surveyed by the Ministry of Agriculture, Fisheries and Food (MAFF). Stocks held in cold stores reserved for private concerns or in undischarged cargoes are not included.

### **Fish and fish products**

#### **Fish**

Fish, fresh, frozen and cured, excluding shellfish.

UK landings, which exclude freshwater fish, are the quantities of fresh and frozen fish and edible offal landed by British fishing vessels. Fish can be landed whole, headless or as fillets and is expressed in standard landed weight equivalent.

Total disposals, which include disposals for export, include fresh, frozen and cured fish. They are expressed in terms of landed weight.

Disposals for food in the United Kingdom include fish used for canning (except the canning of pet foods) whether for home consumption or for export. The landed weight of fresh, frozen and cured fish which is exported, fish taken by fishmeal manufacturers, fish condemned or unsold, and fish used for pet food manufacture, is excluded. The column headed filleted weight shows the estimated edible equivalent, on a fresh fish basis, of the fresh, frozen and cured fish intended for human consumption.

### **Oilseeds and nuts**

Crushed and oil produced. These two columns show the quantities of oilseeds and nuts processed by crushing and the amount of crude oil produced from the crush by expelling and extraction.

**Stocks.** Stocks of oilseeds and nuts held by crushers; their stocks of crude oil are included in the 'vegetable oil stocks' below.

### **Vegetable oil**

**Disposals.** Disposals measures the amount of vegetable oil available for domestic use and for exports from the UK crush of oilseed derived from imports of crude and refined oils, and from changes in stocks (all expressed as a crude oil equivalent). They include oil that will be refined and used in the manufacture of margarine, other table spreads, solid cooking fat and other food. They also include crude vegetable oil used for industrial purposes, e.g. soap manufacture.

**Stocks.** Stocks includes all manufacturers' stocks of vegetable oils including those held by crushers, refiners and producers of margarine, etc. (all expressed as a crude oil equivalent).

### **Marine oil**

**Usage.** This column shows the quantities of marine oils used to produce margarine, other table spreads and solid cooking fats.

**Stocks.** Stocks include oil held by crushers, hardeners, and refiners of oil, and manufacturers of margarine, solid cooking fat and other table spreads.

### **Production of margarine, other table spreads and solid cooking fat**

**Production.** These columns show the output of each of these three products. Information about other table spreads is only available from 1986.

### **Milk and milk products**

#### **Milk**

The figures cover milk sold through the Milk Marketing Board schemes for use as liquid milk and for the manufacture of milk products including cream and farmhouse cheese. The quantity consumed by farm households and used on farms for butter and cream production or calf rearing is excluded.

#### **Milk products**

Figures for butter relate to the output of home creameries and are based on milk usage; production of butter on farms is excluded. Butter stocks represent quantities in public cold stores surveyed by MAFF. They exclude stocks in private stores or in undischarged cargoes.

Figures for cheese relate to all home-produced cheese other than the small quantities produced on farms outside the Farm Cheesemakers' Scheme. Figures for processed cheese are excluded as it is re-manufacture of home-produced and imported cheese.

The condensed milk and milk powder relate throughout to quantities produced from full-cream or skimmed milk.

The condensed and evaporated milk figures are for whole and skimmed milk. Stocks figures refer to manufacturers' stocks only.

The figures for skimmed milk powder exclude buttermilk and whey powder.

### **Hen eggs**

Disposals show the estimated quantities of hen eggs produced for consumption in shell and for processing for human consumption in the United Kingdom, together with imported eggs. Sales figures relate to output for human consumption of eggs in shell.

### **Canned and bottled fruit and vegetables**

Fruits canned or bottled in the United Kingdom include home-grown plums, apples, all varieties of soft fruit, and rhubarb; fruit such as peaches, pears and pineapples, imported either fresh or in containers and canned here, are also included. Stocks are those held by manufacturers.

The chief varieties of vegetables canned are peas (either fresh or processed) and beans in tomato sauce, but carrots, potatoes, other roots, certain green vegetables, and macaroni and spaghetti in tomato sauce are also included. Stocks are those held by manufacturers.

### **Soups**

Soups include the production of all soups whether ready-to-eat, condensed or powdered as well as other food drinks. Figures derived from the Business Statistics Office quarterly inquiries will be available after Quarter 2 1989 due to discontinuation of this quarterly inquiry.

### **Cocoa beans**

The figures show the quantities of raw cocoa beans used for grinding in the United Kingdom and are compiled by the Cocoa Chocolate and Confectionery Alliance.

### **Chocolate, sugar confectionery and cakes**

Figures are collected by the Biscuit, Cake, Chocolate and Confectionery Alliance. Stocks are those held by manufacturers only. Medicated confectionery is excluded.

### **Tea**

Disposals are the quantities moving into consumption and exports. Stocks comprise tea held in public warehouses and amounts held by primary wholesalers.

### **Raw coffee**

Disposals are the total quantities destined for consumption in the United Kingdom. They include re-exports of raw beans and exports of processed coffee. Stocks comprise raw coffee in public warehouses and in transit to such warehouses and manufacturers' stocks.

### **Soft drinks**

The figures relate to physical sales in million litres by manufacturers taken (since 1973) from the Business Statistics Office quarterly inquiry shown in *Business Monitor* PQ4283.

Concentrated drinks include squashes, cordials and other concentrated liquid soft drinks. Unconcentrated drinks comprise carbonated drinks and other unconcentrated drinks. Glucose and diabetic drinks are included. Fruit and vegetable juices together with soft drinks in solid form and flavouring compounds sold separately are excluded.

quarterly figures taken from PQ4283 are divided by three to a monthly rate of sales. They are increased, or grossed-up, to take account of establishments not covered by the inquiry. The grossing-up factor that is used is the overall factor that gives the value of total sales and work done by all establishments classified in PQ4283 from the value by those responding to the inquiry.

### **Tobacco products**

Figures are supplied by HM Customs and Excise. Statistics relate to numbers of cigarettes and weight of other tobacco products.

### **Alcoholic drinks**

Figures are supplied by HM Customs and Excise.

#### **Beer**

Production figures relate to the quantity of worts produced during a period less a standard deduction of 6 per cent, 'worts' being the liquid produced from the mash before fermentation has begun. Average gravity is now about 1,038.0 degrees.

Statistics of home production and consumption take account of high gravity brewing wherein some brewing liquor is added before fermentation. The figures in each case are given in hectolitres in respect of the gravity at which they are brewed.

### **Home production of fresh grapes**

This is any fermented beverage made from fresh grapes, and includes fortified wines and vermouths. The consumption figures are given in the net quantities of still and sparkling wine released for home consumption analysis, in the case of still wine, by strength.

### **Cider and perry**

Cider and perry is any fermented beverage other than beer, made from fresh grapes and beer. An example is 'British sherry' which is made from imported grape concentrate. Coolers with a strength of 2 per cent-5.5 per cent abv are also included in this category.

### **Whisky and perry**

This is cider and perry of a strength less than 8.5 per cent of alcohol by volume obtained from the fermentation of apple or pear juice.

#### **Spirits**

Home-produced whisky. These figures refer to spirits matured in a cask for three years or more certified as Scotch or Northern Irish whisky released for home consumption. Before April 1983, the figures relate to all mature, home-produced spirits.

Other. These figures relate to all other spirits released for home consumption, including imports.

Production figures show the quantity of spirits distilled after adjustment for consumption.

Quantities are given in litres of pure alcohol. A standard whisky is typically 40 per cent alcohol by volume.

### **Industrial ethyl alcohol**

Figures show the quantities of ethyl produced for industrial purposes; industrial ethyl alcohol is distilled from molasses derived from other processes. A small quantity of molasses spirit is used in beverage spirit production.

### **Household food expenditure and consumption**

#### **Sample**

Over the course of a year the National Food Survey investigates the

food budgets of about 7,700 households in a rotating sample of local authority districts selected so as to be representative of Great Britain as a whole. In each household surveyed the housewife (male or female) keeps a record for one week of all food purchased or entering the house without payment. A full description of the sampling method of the National Food Survey is given in the relevant Annual Report of the National Food Survey Committee, the most recent being entitled *Household Food Consumption and Expenditure : 1989* (HMSO 1990).

#### **Household**

A group of persons living in the same dwelling and sharing common catering arrangements. The size of household is defined in terms of the number of persons who spend at least four nights in the household during the week of survey and also have at least one meal a day from the household food supply on at least four days.

The head of the household and the housewife are regarded as persons in all cases.

#### **Old age pensioner households**

Households in which at least three-quarters of the total income is derived from national insurance retirement or similar pensions and/or supplementary pensions or allowances paid in supplementation or instead of such pensions. Such households will include at least one person over the national insurance retirement age.

#### **Adult**

A person aged 18 years or over.

#### **Child**

A person under 18 years of age.

#### **Food purchased**

Quantities of all foods purchased during the week for consumption in the home (but including purchases of milk at school). The Survey excludes food eaten outside the home (except packed meals prepared at home), chocolate and sugar confectionery, most soft drinks, alcoholic drinks, vitamin preparations, and food obtained specifically for consumption by domestic pets. For a few minor miscellaneous items, expenditure is recorded, but not the quantity (e.g. artificial sweeteners, flavourings, colourings, etc.).

#### **Free food**

Quantity of food entering the household without payment for consumption during the Survey week. Milk supplied in schools is included although it does not actually enter the household. Food grown or produced by the household and stored in bulk is recorded only when it is withdrawn from store.

#### **Consumption**

Averaged over a sufficiently large number of households and a sufficiently long period, the average quantity of food purchased plus the quantity of 'free' food will equal the average consumption if there is no general change in the level of larger stocks.

### **Classification of foodstuffs**

#### **Other milk**

Includes condensed milk, dried milk, yoghurt, goats' milk, skimmed milks (liquid and dried) and cream.

#### **Preserves**

Include jams, jellies and curds, marmalade, syrup, treacle, honey and honey spreads.



#### **Other cooked and canned meats**

Include corned meat; luncheon meat; pressed or cooked beef, veal, mutton, lamb, pork; veal and ham; tongue; brawn; meat puddings and pies; pate; ready meals (but not frozen).

#### **Other meat products (not canned)**

Include meat pies; sausage rolls; pasties; puddings; ready meals (includes frozen convenience meat products).

#### **Fish, fresh and processed**

Includes smoked, dried, salted, cooked; pastes, spreads, etc.

### **7. PRODUCTION, OUTPUT AND COSTS**

#### **Index of output of the production industries**

This index is prepared by the Central Statistical Office with the help of statistics divisions of other government departments. It has been calculated with 1985 as the base year for each month from January 1983. The purpose and methods of compilation of the index are described in terms of the 1970-based series in Studies in Official Statistics No. 25: *The measurement of changes in production* (HMSO 1976). An article in *Economic Trends*, No. 424, February 1989: 'The rebased index of production' gives an outline of the way in which the index of production is currently compiled and the changes involved at rebasing onto 1985. An Occasional Paper (No. 22) describing the weights, indicators and sources for each series used to compile the 1985-based index was published in April 1989. It is available from CSO C3, Room 131/2, Central Statistical Office at a cost of £10 (cash with order, please). A consequence of the Review of Department of Trade and Industry Statistics (see below) is that much of the source material in the Paper is now out of date; an updated version will be published in due course.

The series are generally available annually from 1948, quarterly from 1952 and monthly from 1968 and are classified according to the Standard Industrial Classification 1980 (SIC(80)).

The index is intended to provide a general measure of monthly changes in the volume of output of the production industries, which comprise Division 1, energy and water supply and Divisions 2 to 4, manufacturing. The index covers the production of intermediate, investment and consumer goods for the home market and for export.

The index is a weighted average of 287 separate indicators, each of which describes the activity of a small sector of industry. To combine the individual production series, each industry has been given a weight proportional to its value added in 1985 derived from the 1985 Annual Census of Production for manufacturing industries and from national accounts income data sources for energy and water supply industries.

The indicators for the index of output of the production industries are obtained monthly where possible but for a few industries, representing about 3½ per cent of activity, only quarterly data are available. Many of the basic series used to construct the index of output of the production industries measure either final production or deliveries. Neither type of series takes account of changes in stocks of work in progress and series based on deliveries do not take account of changes in stocks of finished goods. All the index numbers in the *Monthly Digest* tables have been adjusted where necessary for estimated changes in stocks.

A system of adjustments to manufacturing output was introduced in January 1986 to allow for understatement in the provisional figures. As a result of the Review of Department of Trade and Industry Statistics (published in December 1988), it was recommended that there should be a substantial strengthening of the Business Statistics Office's monthly inquiry system underpinning the index of production. From July 1989, when the CSO assumed the responsibility for the BSO, the number of contributors to the monthly inquiry significantly increased, with the result that the bias adjustment procedure used for the previous 3½ years was no longer appropriate. It was therefore phased out by December 1989 as the improvements to the estimates from the increased sample size were realised.

The level of production is expressed as a percentage of the average monthly production in 1985. All current value data are deflated to 1985 values using the appropriate producer price indices. To ensure comparability between different months, adjustments have been made (where the basic figures refer to calendar months) for variations in the number of days in each month, excluding for each industry those which are not normally working days. The index numbers, which are *not seasonally adjusted*, thus compare the average weekly rates of production in the different months. They reflect, however, any change in production resulting from public and other holidays and from seasonal factors, for which no adjustments have been made. The *seasonally adjusted* series exclude any changes in production resulting from public and other holidays and from other seasonal factors. The adjustments are designed to eliminate normal month to month fluctuations and thus to show the trend more clearly. The method of seasonal adjustment which is currently being used for this index is the X-II variant of the Census Method II Seasonal Adjustment Program which is described in Technical Paper No. 15 of the US Department of Commerce, Bureau of the Census.

#### **Industrial classification**

The industrial analysis of the index is consistent with the *Standard Industrial Classification Revised 1980* (HMSO 1979), to which reference should be made for details of the composition of each industrial group.

#### **Market sector analysis**

These groupings combine the output of industries which meet broadly similar categories of demand. They were introduced and described in *Economic Trends* No. 241, November 1973. Annex 3 of Occasional Paper No. 22 (see reference in previous column) includes a detailed listing of the series comprising each of the market sectors for the 1985-based index.

#### **Output per head**

For these series, output for the economy as a whole is the output-based measure of the gross domestic product. This series is used to achieve consistency with the industrial analysis, for which the measures of output are the constituent series of the index of output of the production industries. An additional seven groups, which give a comprehensive coverage of manufacturing activities *plus* two non-manufacturing industry groups, are published. Output per person employed includes employees in employment, self-employed persons (with or without employees), including both full-time and part-time workers as full units. Members of HM Forces are included in the indices for the whole economy. The indices of the employed labour force for the whole economy have been adjusted to reflect estimated employment levels for the quarter as a whole.

Index numbers of output per person employed are calculated by dividing an index of output by an index of the numbers employed. Output per person hour in manufacturing industry is derived in a similar way, by dividing the index of manufacturing output by an index of the total hours worked by persons in that sector, based on information for manual and non-manual staff. The operative hours data reflect fluctuations in overtime and short-time working, sickness absence and changes in normal basic hours. The non-manual staff hours are derived from the annual New Earnings Survey results, relating to one pay period in April for employees whose pay was not affected by absence from work.

### Indices of labour costs

The index of total home costs per unit of output is derived by dividing the estimate of gross domestic product at current factor cost based on expenditure data by the corresponding estimate valued at constant prices.

In the series for both wages and salaries and labour costs the denominator is the output measure of gross domestic product at factor cost in constant prices.

The wages and salaries totals in the numerator are adjusted to allow for the earnings of the self-employed, based on the ratio of the employed Labour Force to the number of employees in employment and HM Forces. For further information see *Employment Gazette*, May 1986 page 172.

Labour costs include not only wages and salaries but also employers' national insurance contributions, selective employment tax less premiums and refunds, the national insurance surcharge, contributions to the Redundancy Fund and to superannuation schemes, pension funds, etc. Subsidies received by employers from the various Special Employment Measures are deducted.

Both the series for output per head and labour costs were first published in *Economic Trends* (October 1968) and the *Employment and Productivity Gazette* (October 1968). The article accompanying the series describes in greater detail the construction and significance of the figures.

A monthly index of wages and salaries per unit of output in manufacturing is compiled by the Central Statistical Office using monthly indices of average earnings, employment and output. The construction and significance of the figures are described on pages 261-3 of *Employment Gazette* (June 1982). Annual and quarterly series are constructed from the monthly ones, and figures for recent periods appear regularly in Table 5.7 of *Employment Gazette* and in Table 23 of *Economic Trends*.

## 8. ENERGY

### Inland energy consumption: input of primary fuels and equivalents

#### Coal

Consumption by fuel producers *plus* disposals (including imports) to final users, *plus* (for annual figures only) net foreign trade and stock change in other solid fuels.

#### Petroleum

Inland deliveries for energy use *plus* refinery fuel and losses *minus* the difference between deliveries and actual consumption at power stations and gasworks.

### Natural gas

Indigenous natural gas (methane) produced, excluding gas flared or re-injected, *plus* imports, *plus* colliery methane piped to the surface and consumed at collieries or sold. Supplies for non-energy purposes are also included.

### Primary electricity — nuclear

Electricity generated by public supply nuclear power stations together with estimates of electricity generated for public supply by the United Kingdom Atomic Energy Authority and British Nuclear Fuels.

### Primary electricity — hydro-electricity

Electricity generated by public supply and industrial natural flow hydro-electric power stations (excluding pumped storage stations).

### Primary electricity — net imports

Electricity imported from, less electricity exported to, countries outside the United Kingdom.

### Coal and oil equivalents

The conversion factors used are:

1 tonne of petroleum = 1.7 tonnes of coal  
250 therms of natural gas = 1 tonne of coal

Primary electricity is expressed in coal or oil equivalent as the notional amount of coal or oil that would have been needed to produce the same quantities of electricity at the efficiency of contemporary conventional steam power stations.

### Temperature corrections

The adjusted total inland energy consumption series includes temperature corrections for coal, petroleum and natural gas. Nuclear and hydro-electricity and net imports of electricity are not corrected for temperature.

The corrections used are:

Temperature correction per centigrade degree

Coal	2.1%
Petroleum	0.7% (June-Aug)
	1.8% (Sept-May)

Natural gas is corrected based on a method developed by British Gas plc.

### Supply and use of fuels

#### Production of primary fuel

Coal. Includes all grades of coal, including slurry, whether recovered by British Coal or by other operators.

Petroleum. Crude oil, condensates (C5 or heavier) and petroleum gases, ethane (C2), propane (C3), and butane (C4), obtained from the onshore processing of associated and non-associated gas.

Natural gas. As described under inland energy consumption (excluding imports).

Primary electricity. Nuclear and hydro-electricity as described under inland energy consumption but excluding any net imports of electricity.



### Non-energy use

Petroleum products not used as fuels i.e. feedstock for petroleum chemical plants, industrial and white spirits, lubricants, bitumen, waxes, petroleum cokes and miscellaneous products.

### Total primary energy

This assesses the thermal content of the total input to the economy of primary fuels and equivalents. It includes energy used and lost in the conversion of primary fuels to secondary fuels (for example in power stations and oil refineries), energy lost in the distribution of fuels (for example in transmission lines) and energy conversion losses by final users.

The thermal content of primary fuels consumed by secondary fuel producers consists of their thermal inputs of coal, petroleum and natural gas plus the thermal equivalent of the fossil fuel which would be required to produce nuclear and hydro-electricity, as defined above under 'Coal and oil equivalents'.

### Final consumption

This measures the thermal content of inputs of fuels (primary or secondary as appropriate) to final users. Thus it is net of fuel industries' own use and conversion, transmission and distribution losses, but it includes losses in conversion by final consumers.

Detailed definitions of the final consuming sectors are given in the annual *Digest of United Kingdom Energy Statistics* (HMSO) prepared by the Department of Energy.

### Conversion to therms

In expressing fuel consumption in therms, no conversion is necessary for gases (except petroleum gases). Electricity is converted at:

$$29.3071 \text{ kWh.} = 1 \text{ therm.}$$

The estimated gross calorific values used to convert the statistics for petroleum gases and solid and liquid fuels are published in the *Digest of United Kingdom Energy Statistics*.

### Coal: supply

#### Deep mined coal

Production figures relate to saleable output, i.e. the sum of the coal sold commercially, consumed by the colliery and supplied to ancillary works, and disposed of free and at concessionary prices plus the increase or less the decrease in colliery stocks of saleable coal. Production from licensed mines is also included. Slurry and coal recovered from colliery tips by British Coal is included in deep mined production when sold or consumed at the colliery. Estimates for slurry, etc. recovered other than by British Coal are included in total production only.

#### Opencast coal

Coal which is not mined but is obtained from deposits near the surface mainly by contractors. Screening and washing losses are excluded.

### Coal: imports and exports

The figures are derived from returns made by importers and exporters to HM Customs and Excise, and published in summary form in the *Overseas Trade Statistics of the United Kingdom* (HMSO).

### Mined coal: manpower and productivity

Figures for manpower and output per manshift relate only to collieries operated by British Coal.

### Wage earners on colliery books

Includes men in industrial grades employed at collieries, on colliery activities and salvage operations and trainees at training centres (excluding supervisory staff). Colliery activities include colliery labour pools, coal preparation and blending plants, stone and dirt disposal and treatment, coal stocking grounds and pumping stations.

Men absent with good reason are taken off colliery books after eighteen months absence. Men absent without good reason are normally removed from the books after three weeks.

### Average output per manshift

Overall and underground (total): the total output of saleable revenue coal divided by the total revenue manshifts worked.

Underground (production): the output of saleable revenue coal from production faces divided by the number of manshifts worked by men directly engaged on the coal-getting operations, including craftsmen, trainees and officials.

From April 1980 certain drivages have been re-classified from revenue to capital account, and both the manshifts worked and the coal produced from those drivages are now excluded from the calculations.

### Coal: inland consumption

#### Statistical Calendar

The electricity supply and iron and steel industries (major consumers of coal) have been operating a new statistical calendar (to determine the weeks included in four or five week statistical months) commencing from the first full week in January 1988. British Coal however, retained their existing statistical calendar, in which the statistical month of January commenced one week earlier, on 27 December 1987, until the end of March 1990. As a result the monthly periods used for coal production between January 1988 and March 1990 differed by one week from those used for the bulk of the figures on coal consumption and stocks. Although coal production data are now on a consistent basis with consumption, comparisons before 1 April 1990 will be particularly affected when both monthly periods do not contain the same public holiday.

#### Collieries

Coal used for boilers, colliery power stations and other purposes.

#### Power stations

Coal used for all purposes by major generating companies (see Electricity: public supply system, below).

#### Coke ovens

Coal carbonized, consumed for other purposes or lost in cleaning at coke ovens.

#### Other conversion industries

Consumption of coal at low temperature carbonization plants, briquette works and for all purposes at gasworks making gas for public supply.

#### Industry

Coal used for all purposes at other industrial establishments. Prior to 1984 figures relate to colliery and opencast disposals. From 1984 they also include estimated proportions of steam coal imports.

### **Domestic**

House coal: prior to 1984 figures relate to colliery and opencast disposals and include coal supplied free of charge or at reduced prices to miners, officials, etc. in the coalfields. From 1984 they also include estimated proportions of steam coal imports.

Other: figures include colliery and opencast disposals of anthracite and dry steam coal *plus* disposals of imports of these naturally smokeless fuels.

### **Miscellaneous**

Colliery and opencast disposals to national and local authorities, commercial and non-industrial establishments, transport undertakings and shipments to the Channel Islands.

### **Stocks**

Undistributed *plus* distributed stocks: undistributed stocks are those held at collieries and opencast sites and distributed stocks are those held by the fuel conversion industries, by railways and by the armed services.

### **Gas: public supply**

The public gas supply system consists of British Gas plc and the gas supply undertakings in Northern Ireland.

### **Natural gas supply**

This is the natural gas input into British Gas's transmission system. Indigenous supplies include those purchased by British Gas from operators on the United Kingdom part of the Continental Shelf as well as from those operating on land in this country.

### **Gas sent out**

Town gas, substitute natural gas and natural gas for both energy and non-energy purposes.

### **Electricity: public supply system**

The companies covered by the figures for fuel used and electricity generated and supplied are the main generating companies in the UK, namely National power, PowerGen, Nuclear Electric, National Grid Company, Scottish Power, Hydro-Electric, Scottish Nuclear, Northern Ireland Electricity Service, Midlands Electricity and South Western Electricity and their predecessors. For electricity available the figures cover electricity distributed through the grid in England and Wales and from supply companies in Scotland and Northern Ireland.

### **Fuel used**

The factors used for conversion to coal equivalent are given under 'Coal and oil equivalents'.

### **Own use**

The difference between total electricity generated and electricity supplied, and is the electricity used at the works for lighting and auxiliary power, and for pumping at pumped storage stations.

### **Total electricity available**

Electricity supplied from major generating companies *plus* purchases from other UK producers (mainly nuclear power stations of the United Kingdom Atomic Energy Authority and British Nuclear Fuels) *plus* net imports from overseas.

### **Sales of gas and electricity: public supply**

Gas sales include adjustment to the quantities billed to allow for the estimated consumption remaining unread at the end of each period. The figures of gas supplied to the iron and steel industry are based on information provided by that industry.

Sales of electricity are less than total electricity available because of losses in transmission and distribution etc., and include consumption by the supply industry's offices and showrooms. They include an adjustment to billed sales to allow for the estimated usage remaining unread at the end of each period.

### **Petroleum**

#### **Total indigenous production**

This is the aggregate amount of:

- a. crude oil produced on land;
- b. crude oil produced in the United Kingdom part of the Continental Shelf and includes any petroleum gases and condensates separated from the oil at subsequent processing stages (prior to refining). This quantity is as recorded before any deduction for utilities use or adjustment for stock change on platform (including tanker-loading systems) or losses;
- c. condensates from gas fields (production is measured at the land terminal separation plant after the gas has been processed and condensates extracted).

#### **Arrivals and shipments**

The terms 'arrivals' and 'shipments' are used to distinguish figures recorded by importers and exporters of oil from import and export figures provided by HM Customs and Excise. Arrivals and shipments are used in order to be consistent with the other statistics reported by the petroleum industry.

#### **Inland deliveries into consumption**

Deliveries of all petroleum products in the United Kingdom and the Channel Islands including petroleum substitutes marketed by the petroleum industry. Coal tar fuels, natural gas (methane) and refinery fuel are excluded. Otherwise, the figures are inclusive of the petroleum industry's own use.

Gas/diesel and fuel oils used in coastal and fishing craft are included in inland deliveries, but deliveries under bunker contracts for ships engaged in foreign trade are excluded.

#### **Products used as fuel**

Propane - hydrocarbon containing three carbon atoms, gaseous at normal temperature but generally stored and transported under pressure as a liquid. Used mainly for industrial purposes and some domestic heating and cooking.

Butane - hydrocarbon containing four carbon atoms, otherwise as for propane. Additional uses - as a constituent of motor spirit to improve volatility and as a chemical feedstock.

Naphtha (light distillate feedstock) for gasworks - petroleum distillate boiling predominantly below 200°C.

Aviation spirit - specially blended light hydrocarbons intended for use in aviation piston-engined power units, whether in the air, on land or water, including bench testing of aircraft engines.

Wide-cut gasoline - light hydrocarbon oils intended for use in aviation gas-turbine power units.

Motor spirit - blended light petroleum distillates used as a fuel for spark-ignition internal combustion engines other than aircraft engines.

Aviation turbine fuel - specially refined kerosene intended for use in aviation gas-turbine power units.

Burning oil (kerosene) - refined petroleum distillate intermediate in volatility between motor spirit and gas oil, used for lighting and heating. Excluding distillates which are included under white spirit and kerosene used for lubricant blends.

Premier - for use in free-standing, flue-less domestic burners.

Standard - for use in vaporising and atomising burners mainly used for domestic heating in appliances connected to flues.

Gas/diesel oil - petroleum distillate having a distillation range intermediate between kerosene and light lubricating oil:

- a. Derv (Diesel Engined Road Vehicle) fuel-gas/diesel oil for use in high-speed, compression-ignition engines in road vehicles subject to Vehicle Excise Duty;
- b. other - used in furnaces for the production of heat (e.g. for central heating) in engines of vehicles not subject to Vehicle Excise Duty (e.g. diesel locomotives, tractors, earth-moving equipment) and in stationary diesel engines and gas turbines (e.g. for the generation of electricity and for air compressors, etc.). Also includes marine diesel oil - a heavier type of gas oil suitable for heavy industrial and marine compression-ignition engines.

Fuel oil - heavy petroleum distillates or petroleum residues or blends of these used in furnaces for the production of heat or power. Excluding fuel oil for grease making or lubricating oil and fuel oil sold as such for road-making.

#### Products not used as fuel

Feedstock for petroleum chemical plants - all petroleum products intended for use in the manufacture of petroleum chemicals. (A deduction has been made from the deliveries equal to the quantity of feedstock used in making the conventional petroleum products which are produced during the processing of the feedstock.)

White spirit - a highly refined distillate with a boiling range of about 150°C to 200°C used as a paint solvent and for dry cleaning purposes, etc.

Industrial spirits - refined petroleum fractions with boiling ranges up to 200°C dependent on the use to which they are put, e.g. seed extraction, rubber solvents, perfume, etc.

Lubricating oils (and greases) - refined heavy distillates obtained from the distillation of petroleum residues. Includes liquid and solid hydrocarbons sold by the lubricating oil trade, either alone or blended with fixed oils, metallic soaps and other organic and/or inorganic bodies.

Bitumen - the residue left after the production of lubricating oil distillates. Used mainly for road-making and building construction purposes. Includes other petroleum products, creosote and tar mixed with bitumen for these purposes and fuel oil sold as such for road-making.

Petroleum waxes - includes paraffin wax, which is a white crystalline hydrocarbon material of low oil content normally obtained during the refining of lubricating oil distillate, paraffin scale, slack wax, microcrystalline wax and wax emulsions. Used for candle manufacture, polishes, food containers, wrappings, etc.

Petroleum cokes - carbonaceous material derived from hydrocarbon oils, uses for which include electrode manufacture. An unknown quantity of this product may be used as a fuel.

Miscellaneous products - includes aromatic extracts, defoamers, solvents and other minor miscellaneous products.

## 9. CHEMICALS

### Fertilisers and other miscellaneous products Deliveries to UK agriculture

Natural organic fertilisers are excluded from the statistics. Figures are of manufactured fertilisers. Manufactured fertilisers may be straight (i.e. containing only one of the three primary nutrients - P205, phosphate; N, nitrogen; and K20, potash) or compound (i.e. containing either two or three of these primary nutrients).

All figures include imported fertilisers. Nitrogen deliveries are expressed in nutrient content terms and are divided into straight nitrogen fertilisers and the nutrient content of nitrogen in compound fertilisers. Phosphate and potash delivery figures show the nutrient content tonnes of these primary nutrients in both straight and compound fertilisers. The total weight of compound fertilisers delivered to UK agriculture is stated separately.

### Industrial ethyl alcohol

Figures show the quantities of ethyl alcohol produced for industrial purposes; industrial ethyl alcohol is distilled from molasses or derived from other processes. A small quantity of molasses spirit is used in beverage spirit production.

### Soap

Figures relate to production of manufacturers employing 25 or more persons until fourth quarter 1980, and thereafter to those employing 50 or more, and represent production for all purposes, including export, of all types of soap except dentifrices. Lathering shaving soap, and cream and soap shampoos are included.

### Synthetic detergents

The figures relate to sales of detergents by the larger United Kingdom manufacturers, defined as those employing 25 or more persons until fourth quarter 1980 and 50 or more thereafter, for use primarily for washing purposes. Surface-active material for use as disinfectants, wetters, spreaders and emulsifiers is excluded. Detergent precursors, e.g. dodecylbenzene, and abrasive and scouring preparations containing synthetic detergents are also excluded. From the first quarter 1980 to fourth quarter 1981 and from the fourth quarter 1986, figures exclude sales of liquid detergent in packs for domestic use and from the first quarter 1981, sales of paste synthetic detergents.

### Sulphur and sulphuric acid

#### Sulphur, etc

The figures relate to acid sulphur, spent oxide, and zinc concentrates for use in the manufacture of sulphuric acid. Figures for acid sulphur include recovered sulphur and imported sulphur.

Stocks of acid sulphur and spent oxide are quantities at acid works.

#### Sulphuric acid (as 100 per cent acid)

Consumption figures include recovered sulphuric acid.



## **Dyestuffs and pigments: paint and varnish**

### **Dyestuffs and pigments**

From first quarter 1981, figures relate to sales by manufacturers employing 100 or more persons, replacing the previous level of 25. The figure for synthetic dyestuffs includes the following groups: acid, azoic, basic, direct, disperse, mordant, sulphur, solvent and vat. Annual figures are only available after second quarter 1989.

Synthetic organic pigments include toners and lakes.

Sales are stated in terms of actual weight, i.e. the total weight of a pigment or dyestuff.

### **Paint and varnish**

From first quarter 1990, figures relate to sales by manufacturers employing 100 or more persons, replacing the previous level of 50. Emulsion and other water paints include emulsion paints and oil and synthetic-based aqueous building, structural and preservative and finishing products. Figures for cellulose-based paints, varnishes and lacquers include clear solutions and pigmented cellulose paints. Other includes oil and synthetic-based non-aqueous paints, marine paint (anti-fouling and anti-corrosive paints and compositions for use below water line only); bituminous paints.

## **Synthetic resins and plastics materials**

From first quarter 1981, figures refer to sales by manufacturers employing 75 or more persons, rather than the previous level of 25. Annual figures only are available after second quarter 1989.

### **Products of condensation, polycondensation and polyaddition**

These include alkyds, aminoplastics, phenolics, unsaturated polyesters, epoxide resins and other products including polyurethanes (non-foam forms). Casein products are excluded throughout whilst polyamides used for fibre spinning are included throughout. Other polyamides (including monomer cast forms) are excluded from quarter one 1983 to quarter four 1986. Figures from the first quarter 1986 to the first quarter 1987 exclude modified resins. Figures from fourth quarter 1984 exclude flexible and rigid foam. Figures from quarter one 1988 further exclude products other than alkyds, aminoplastics, phenolics, polyurethanes and polyamides.

### **Products of polymerisation and copolymerisation**

These include acrylics, polyolefins, polyvinyl chloride, polyvinyl acetate, polystyrene and ABS.

### **Cellulosics and other plastics and modified natural resins**

From the first quarter 1983, figures for cellulosics and other plastics and modified natural resins consist only of regenerated cellulose film.

### **Intermediate forms between resins and semi-finished products**

These comprise moulding and extrusion compounds of alkyds, unsaturated polyesters, and aminoplastics and plasticised and unplasticised compound of polyvinyl chloride. Moulding and extrusion compounds of phenolics are included up to first quarter 1983.

### **Semi-finished products**

These mainly comprise laminated thermosetting sheet and unconverted film and sheet. Figures from the first quarter 1984 to the first quarter 1986 and from the first quarter 1987 exclude copper-clad and glass-based industrial laminated thermosetting sheet. Extruded flexible plasticised film is excluded from the first quarter 1984.

## **Production of selected organic chemicals**

From first quarter 1990, figures relate to sales by manufacturers employing 100 or more persons, replacing the previous level of 50.

## **10. METALS, ENGINEERING AND VEHICLES**

### **Iron and steel**

The general definition of the iron and steel industry is based on groups 221 'ECSC Iron and Steel', 222 'Steel Tubes' and 223 'Steel Drawing, Cold Rolling and Cold Forming' of the UK Standard Industrial Classification (1980), except those parts of group 223 which cover the manufacture of drawn wire, wire products and cold formed sections.

The definition therefore covers blast furnaces and associated preparation plant, steel melting shops, ingot casting and continuous casting plant, hot rolling mills and cold wide strip or plate mills together with associated coating plants and tinplate mills. Also included are tube and pipe mills, cold narrow strip mills and bar drawing or cold finishing plants.

The definition also includes liquid steel for castings but excludes finished steel castings. Also excluded from the definition are refined iron, steel tyres, wheels, axles and rolled rings, open and closed die forgings, colliery arches, cold formed sections and finished wire. The definition also excludes the activities of iron foundries.

### **Crude Steel**

The total of usable ingots, usable continuously cast semi-finished products and liquid steel for castings. This definition is identical to that of the ECSC and generally measures production of crude steel at the first stage of solidification, except that steel for castings is measured at the liquid stage since solidified castings do not fall within the scope of the ECSC Treaty of Paris.

### **Alloy Steel**

Steel containing by weight at least 0.5 per cent of silicon, or 1.6 per cent of manganese, or 0.3 per cent of chromium or nickel, or 0.0008 per cent of boron, or 0.1 per cent of any other element except carbon, lead, nitrogen, phosphorus or sulphur. Alloy steels include stainless steel and heat resisting steels which contain 10.5 per cent or more of chromium, with or without other alloy elements, and less than 1.2 per cent of carbon.

### **Non-ferrous metals**

Stocks of non-ferrous metals relate to consumers' stocks, stocks held in the London Metal Exchange's United Kingdom warehouses and other privately held stocks, but exclude all government held stocks. Stocks in transit in the United Kingdom are included throughout.

### **Copper**

Primary copper is copper refined from imported blister. Secondary refined copper includes copper refined from scrap but excludes re-melted copper. Consumption of refined copper (primary and secondary) is as reported by consumers.

Consumption of copper in scrap is obtained by the difference between copper content of output and consumption of refined copper. Monthly figures of scrap consumption are particularly affected by variations in the amount of work in progress and should be used with caution.

Production of wrought semi-manufactures includes wire, rods, bars, sections, sheet, strip, plate and tubes of copper and copper alloys (gross weight of alloys).

Production of castings, includes both copper and copper alloys (gross weight of alloys).

Stocks of refined copper include copper in wire bars.

### **Aluminium**

Primary production includes primary based alloy. Secondary production includes primary content of secondary.

Despatches includes despatches to home customers and exports. Primary despatches includes imported material. Wrought material includes wire, rods, bars, sections, sheet, strip, plate and tubes of aluminium and aluminium alloys.

### **Lead**

For refined lead the series relate to soft and antimonial lead refined from secondary and scrap material, and from domestic and imported ores, including that refined by consumers for their own use; also included is lead refined from bullion.

Home consumption of refined lead includes imported primary and secondary, domestically refined lead and lead imported for processing on toll. Stocks of refined lead include imported primary and secondary, and also domestically refined lead.

The consumption of scrap lead includes re-melted lead but excludes secondary antimonial (hard) lead recovered from scrap, whether for sale or own use, when used by the ultimate consumer.

### **Tin**

Home consumption of tin is as reported by consumers.

### **Zinc**

Slab zinc is unwrought zinc, excluding re-melted zinc.

Under 'consumption' other zinc (metal content) includes not only scrap (zinc content of brass and other alloy scrap, re-melted and scrap zinc metal and zinc content of residues) but also partially refined metal not classified as slab zinc and concentrates used directly in manufacturing processes such as galvanizing (but not used in zinc production).

### **Engineering and allied products**

This table presents statistics collected in the Business Statistics Office's quarterly sales inquiries and published in *Business Monitors*.

These statistics represent estimated total sales, by UK manufacturers, of the principal products of activity headings in Division 3 of the Standard Industrial Classification 1980, excluding ferrous and non-ferrous metal foundries (AH 311/2), process engineering contractors (AH 3246), electrical equipment installation (AH 3480) and shipbuilding and repairing (AH 3610). Waste products and work done are also excluded. The sales of principal products of Division 3 by establishments not classified to that Division are included, together with estimates for such sales by establishments falling below the employment thresholds of the quarterly sales inquiries.

### **Mechanical, instrument and electrical engineering seasonally adjusted volume index numbers**

These tables provide seasonally adjusted volume index numbers of total, home and export sales, orders-on-hand and new orders (net of cancellations) of the industries classified to Classes 32, 33, 34 and 37 of the Standard Industrial Classification 1980, excluding process plant engineering contractors. The basic data for the index numbers of home sales and orders-on-hand are obtained by subtracting exports from totals and data for new orders are derived from current sales and the change in orders-on-hand. Seasonally adjusted total indices are obtained by combining the seasonally adjusted home and export series.

The index numbers for the combined engineering industries are initially published, together with a commentary, in *CSO Business Bulletin*. The indices are based upon the results of monthly and quarterly inquiries, estimates being made for non-respondents.

### **Motor vehicles**

The production figures for individual months are totals for periods of four or five weeks.

#### **Passenger cars**

Taxis, estate cars and station wagons are included. Car kits delivered as such by manufacturers for assembly abroad are included where the kits' values constitute the major part of the complete vehicle.

#### **Commercial motor vehicles**

The following types of vehicles are included: lorries and vans, ambulances, motive units for articulated vehicles and special-type vehicles other than tracked armoured fighting vehicles for the Services. Chassis delivered as such by motor manufacturers are included.

## **11. TEXTILES AND OTHER MANUFACTURES**

### **Indices of production in the textile and clothing industries**

These indices provide a general measure of the changes in the volume of production in the textile and clothing industries. For further information regarding the compilation of these indices, see Section 7.

#### **Textiles**

##### **Raw cotton**

Home consumption figures show the quantities used for cotton spinning.

Stocks figures represent the estimated weight of raw cotton held in Liverpool and Manchester certified warehouses and by spinners in mills and warehouses (other than those in Liverpool and Manchester).

##### **Single yarn spun in the cotton industry**

Production is the total conditioned weight of single yarn spun whether for sale or for further manufacture by the same firm. Yarn spun on commission is included.

Cotton yarn excludes waste yarns and mixture yarns.

Cotton waste yarns are yarns spun from cotton waste and from raw cotton.

Spun man-made fibre and mixture yarns are spun yarns of rayon, nylon and other man-made fibres, mixture yarns of cotton and man-made fibres and waste yarns other than those wholly of cotton waste and raw cotton.

#### **Woven cloth of cotton and man-made fibres**

The figures include cloth made for sale, cloth which is made up into household textiles, etc. by the same firm, and cloth woven on commission. Cloth for industrial uses such as tyre fabric is included as well as cloth for clothing and for household textiles. The figures represent the length in metres of cloth in the loom state before undergoing finishing processes: but cloth intended for splitting is included in length as split (for example, one metre of cloth intended to be split into two pieces is shown as two metres).

Cotton cloth is cloth predominantly of cotton by weight (excluding 50/50 mixtures with other fibres).

Man-made fibre and mixture cloth is cloth made wholly from continuous filament and spun man-made fibre yarns, and mixture cloth containing man-made continuous filament yarn and spun yarns.

#### **Man-made fibres**

Figures relate to output of man-made fibres in commercial production in the United Kingdom.

#### **Woollen yarn**

Production figures are estimated from the weight of all fibres including man-made fibres, consumed by spinners of yarn on the woollen system. All types of yarn are covered, including hand-knitted and carpet and rug yarns.

#### **Worsted yarn**

Delivery figures are of yarn spun on the worsted and semi-worsted systems.

#### **Woven wool fabrics**

The figures represent the total deliveries of all fabrics woven in the wool textile industry. Woven woollen fabrics are fabrics which are mainly woollen by weight of components; similarly, woven worsted fabrics are fabrics which are mainly worsted by weight of components.

#### **Wool blankets (including mixtures and man-made fibres)**

The following factors apply: 1 full size blanket = 4.51 square metres, 1 cot blanket = 1.17 square metres.

#### **Hosiery and other knitted goods**

From the first quarter 1990 figures relate to sales by establishments employing 75 or more persons, replacing the previous level of 25. These figures include garments made up from knitted fabrics of all types by establishments engaged in knitting, except those engaged mainly in warp knitting. The figures exclude garments made up from knitted fabrics by establishments not engaged in knitting.

#### **Footwear**

Up to and including fourth quarter 1984 figures relate to sales by establishments employing 25 or more persons, from first quarter 1985 until fourth quarter 1989 figures relate to establishments employing 50 or more persons and from first quarter 1990 onwards figures relate to establishments employing 100 or more persons.

### **Timber**

#### **Softwood and hardwood**

Deliveries of imported softwood and hardwood are based on imports as recorded in *Overseas Trade Statistics* adjusted for stock changes notified by importers.

Pitwood is excluded. Hardwood figures include logs for veneer production.

#### **Plywood**

Deliveries are calculated from imports, as recorded in *Overseas Trade Statistics*, adjusted for stock changes notified by importers.

Includes all plywood, blockboard, laminboard and batten-board.

#### **Pitwood**

All mining timber specially prepared for use underground in coal mines for propping and shoring or as pit sleepers. Figures are shown in solid cubic metres (3.57 solid cubic metres equivalent to a Gothenburg standard of round wood and 3.12 solid cubic metres equivalent to a Gothenburg standard of sawn wood).

Round pitwood comprises pitprops, props split, round bars and long pitwood.

Production figures are based on British Coal consumption of home-grown timber.

#### **Domestic furniture**

Estimated sales of mainly wooden and upholstered domestic furniture (excluding beds and mattresses) by establishments in the United Kingdom employing 35 or more people.

#### **Paper and board**

Production figures are weekly averages for four or five-week periods. The figures for imports and exports have been taken from the monthly *Overseas Trade Statistics* and converted to seven-day weekly averages. The figures for stocks relate to quantities held by paper and board makers. Board excludes fibreboard.

#### **Paper-making materials other than woodpulp**

Consumption figures relate to consumption by paper and board mills. Stocks figures show the quantities held at these mills.

#### **Paper equivalent**

The paper equivalent figures show the approximate amount of paper which it is estimated can be produced from the paper-making materials other than woodpulp shown as consumed or in stock. They are: straw 43 per cent, rags, etc. 66.67 per cent, waste paper 85 per cent, esparto 42 per cent, pulpwood (other than round) 37.5 per cent. The paper equivalent of one tonne of round pulpwood is estimated at 0.63 tonnes.

#### **Pulpwood**

Pulpwood includes home-grown pulpwood, wood waste, chippings and rejected pitprops.

#### **Woodpulp for paper-making**

This consists of imported woodpulp of the following types: chemical woodpulp, that is, chemical sulphite (unbleached and bleached), chemical sulphate and soda (unbleached, semi-bleached, partly bleached and bleached) and semi-chemical woodpulp; mechanical woodpulp (including knotted and screenings). Both are in terms of air dry weight used or held by paper-makers and manufacturers of cellulose wadding. Pulp derived from imported and home-produced pulpwood, rejected pitprops and wood waste is excluded.



### **Rubber (Products and synthetic rubber)**

Figures for new tyres and tubes relate to sales by manufacturers employing 300 or more people from first quarter 1981, the previous employment level having been 25 people. Figures for retreads, belting, hose and tubing and other rubber products refer to sales by firms employing 25 or more people up to fourth quarter 1980 and by those employing 100 or more people thereafter. Some plastics products are included in the belting, hose and tubing and other rubber products categories. Other rubber products include such items as coated fabrics, cellular products, footwear components, fluid seals, rubber compounds, and various moulded, bonded, extruded, hand built dipped and cast products. Figures for synthetic rubber refer to sales by firms employing 25 or more people. Annual figures only are available from second quarter 1989.

### **Brushes**

Up to and including fourth quarter 1980, figures relate to firms employing 25 or more persons. From first quarter 1981, figures relate to firms employing 50 or more persons and from first quarter 1990, they relate to firms employing 100 or more persons. Other brushes include painting rollers, artists' brushes, cosmetic and bottle brushes, brushes for machines and other industrial brushes.

### **Floorcoverings**

Up to fourth quarter 1989, figures relate to firms employing 25 or more persons and thereafter to those employing 50 or more persons.

### **Carpets and rugs**

The term Carpets includes carpeting and carpet type rugs. The figures for All types include those for items not shown separately, namely: non-woven carpets, carpeting and carpet type rugs, including needleloom, and rugs other than carpet type rugs.

### **Floorcoverings of linoleum and plastics materials**

With effect from the first quarter 1981, figures relate to sales by manufacturers employing 100 or more persons (replacing the previous level of 25) and making floorcoverings of both textile and non-textile based linoleum and plastics. Annual figures only are available from second quarter 1989.

## **12. CONSTRUCTION**

### **Value and volume of construction work and new orders obtained**

Figures for the construction industry are based on Division 5 of the 1980 Standard Industrial Classification.

The value of output represents the value of construction work done during the quarter in Great Britain and is derived from returns made by private contractors and public authorities with their own direct labour forces. The series (and the accompanying index of the volume of output) include estimates of the output of small firms and self-employed workers not recorded in the regular quarterly output inquiry.

The new orders statistics are collected from private contractors and analysed by the principal types of construction work involved. The series includes speculative work for eventual sale or lease undertaken on the initiative of the respondent where no formal contract or order is involved.

### **Building materials and components**

Unless otherwise stated, the figures are from returns submitted by producers.

### **Building bricks**

The figures include common, facing and engineering bricks made from shale, sandlime, clay or concrete, but exclude glazed bricks and all types of refractory bricks.

### **Fibre cement products**

The figures cover products made using all types of fibre (including asbestos fibre).

### **Concrete building blocks**

Information refers to both aggregate and aerated concrete blocks.

### **Concrete roofing tiles**

Figures relate to area of roof coverage.

### **Ready-mixed concrete**

Figures are for production in the United Kingdom and are derived from a quarterly summary provided by the British Ready-Mixed Concrete Association, British Aggregate Construction Materials Industries and separate returns made by non-members of the Association.

### **Slate**

The figures cover slate mined or quarried for all purposes including roofing and damp-proof courses, architectural and cladding uses.

### **Sand and gravel**

The figures include both land-won and marine-dredged sales and consist of building sand, concreting sand, gravel and hoggins.

### **Housing**

The table on housebuilding relates to permanent dwellings built by private enterprise, housing associations, local authorities, new towns and government departments. Temporary houses and mobile homes are excluded.

Figures for private enterprise and housing associations (excluding the Scottish Special Housing Association) are each shown separately.

Figures for local authorities, new towns and government departments include houses provided by local authorities, the Commission for the New Towns and new town development corporations, the Scottish Special Housing Association, the Northern Ireland Housing Executive, together with dwellings provided or authorised by government departments for the families of police, prison staff, the armed forces and certain other services.

## **13. TRANSPORT**

### **Road vehicles in Great Britain**

In general the classes of vehicles are based on the taxation classes set out in schedules to the Vehicle (Excise) Act 1971, although in some cases they have been renamed.

### **Private and light goods**

Includes all vehicles used privately, mostly consists of private cars and vans. However from 1 October 1990 goods vehicles less than 3,500 kgs gross vehicle weight are now included in this category.

#### **Goods vehicles**

Mostly goods vehicles greater than 3,500 kgs gross vehicle weight but this category includes figures for farmers' and showmen's goods vehicles that are less than 3,500 kgs.

#### **Motor cycles, scooters and mopeds**

No distinction between these different types of machine is made for taxation purposes. It is therefore not possible to distinguish between mopeds, motor scooters and motor cycles.

#### **Public transport vehicles**

All vehicles classified for taxation purposes as hackneys (these are vehicles used for public conveyance, i.e. buses, coaches, taxis and private hire cars). Buses and coaches not licensed for public conveyance e.g. some works and school buses, are excluded and are classified for excise licensing purposes with private and light goods vehicles.

#### **Agricultural tractors and machinery**

Agricultural tractors and other self-propelled agricultural machinery which are used for certain defined purposes connected with agriculture and forestry are all taxed at a special rate. This taxation class also includes machinery, works trucks, mobile cranes and mowing machines which make little use of public roads.

#### **The Crown vehicle scheme**

All vehicles owned by government departments apart from those belonging to the armed forces are registered but pay no tax under the Vehicle (Excise) Act. Most of these operate under Certificates of Crown ownership.

#### **Other exempt vehicles**

There are some vehicles designed and used for particular purposes which are registered when they are first brought into use but which pay no vehicle excise duty. Among these, three types (fire appliances, ambulances and road rollers) do not carry a licence disc and their exemption is indefinite without renewal. Others (e.g. invalid vehicles, snow ploughs, certain road construction vehicles) have their exemption from duty renewed annually and carry a licence disc.

The figures for current licences mostly consist of vehicles which pay excise duty, but they also include vehicles which are exempt from the payment of tax (i.e. those which carry a form of licence known as a nil licence) and they include vehicles for which no form of licence is required. Since 1979 the figures include two classes of exempt vehicles which were not previously included: vehicles which make no use of public roads (tax class 61) and vehicles which make limited use of public roads (tax class 62).

#### **Taxation class changes**

From 1 October 1990, all general goods vehicles less than 3,500 kgs gross vehicle weight were assessed for vehicle excise duty at the same rate as private vehicles. This change in taxation of goods vehicles has affected the time series of new registrations (Table 13.1) in this publication. To correct for these changes retrospective estimates have been made of 'Other vehicles' within 'Private and Light goods' and 'heavy goods' for the period prior to October 1990.

#### **Sources**

Statistics are based on licensing records held at the Driver and Vehicle Licensing Agency (DVLA) at Swansea. Before 1978, however, statistics of vehicles currently licensed were based on a combination of those records which were held at DVLA and those which were held at local taxation offices. Pre-1978 figures have been adjusted to be comparable with later figures based wholly on DVLA records.

#### **Road traffic and inland goods transport in Great Britain**

The index of tonne-kilometres of road goods transport is estimated from a continuing sample survey of goods vehicles. Up until mid-year 1981, samples were taken from a file of all heavy goods vehicles on operators' licences. From mid-year 1981, the sample has been drawn from a centralized record of heavy goods vehicles licensed to use the public road. Linking the two series proved difficult and final estimates for the years 1980 and 1981 were only finalised in 1986. There were consequent revisions to the tonne-kilometres estimates which are reflected in the present revised index. Quarterly index numbers for road transport are obtained by dividing each quarter's figure of tonne-kilometres performed by road by the quarterly average in 1977. The quarterly figures relate to 13-week periods and not to three calendar months, so no adjustment for differences in the length of calendar months is necessary. Annual index numbers are obtained in a similar way by dividing the estimated annual road tonne-kilometres by the corresponding figure in 1977.

The index of vehicle kilometres travelled on roads in Great Britain is estimated from roadside traffic counts which take two forms: occasional short counts at large numbers of sites to estimate the absolute level of traffic (the 'rotating' census) and frequent counts at a small number of sites (the 'core' census) to estimate changes in the amount of traffic. These counts are used to derive average vehicle flow and the vehicle kilometre estimates are the product of this average flow and the total lengths of roads.

#### **Road casualties in Great Britain**

These figures are compiled from information received by the Department of Transport, the Scottish Development Department and the Welsh Office from police forces throughout Great Britain. Only those casualties from road accidents occurring on the public highway (including footways), in which a road vehicle was involved, and which became known to the police are included.

Casualties are classified according to the degree of injury sustained. The degrees of injury are defined as follows:

**Killed:** sustained injuries which caused death less than 30 days after the accident.

**Serious injury:** an injury for which a person is detained in hospital as an in-patient, or any of the following injuries whether or not he is detained in hospital: fractures, concussion, internal injuries, crushings, severe cuts and lacerations, severe general shock requiring medical treatment, and injuries causing death, 30 or more days after the accident.



Slight injury: an injury of a minor character such as a sprain, bruise, or cut which is not judged to be severe, or slight shock requiring roadside attention.

### **Road passenger transport**

The annual figures for buses and coaches are derived from returns from operators in both the public and private sectors.

### **Indices of local (stage) bus fares**

The information used to calculate the index of local (stage) bus fares is collected from a panel of large PSV operators accounting for nearly 85 per cent of all local (stage) work.

### **Passenger journeys**

On London Transport all journey figures are 'originating' journeys. Return tickets are counted as two journeys. Season ticket journeys are those estimated to have been made in each year irrespective of when the ticket was sold.

### **Freight traffic**

#### **British Rail**

The figures include all trainload and wagonload revenue-earning traffic carried on freight trains.

All departmental traffic (i.e. goods carried by British Rail for its own purposes either on revenue-earning trains or special departmental trains) and GPO and parcels traffic (carried on coaching trains) are excluded.

### **Civil aviation**

The statistics cover the scheduled services of British Airways and other UK private companies.

Scheduled services are defined as those where all the cargo capacity and at least 50 per cent (or such other percentage as may be specified in the licence) of the passenger carrying capacity of the aircraft has been made available by the operator or his agent (without the intervention of a charterer) for purchase by the public.

The figures refer only to revenue kilometres and traffic and therefore exclude such items as training, positioning and test flights and non-revenue passengers and cargo.

In combining kilometre statistics, distances have been calculated on the great circle distance between two traffic stops. If a technical stop intervenes the distance is the sum of the two stages caused by the technical stop.

### **Domestic services**

Services flown entirely within the United Kingdom, Isle of Man and Channel Islands.

### **International services**

Services flown between the United Kingdom, Isle of Man, Channel Islands and points overseas, and services flown between points outside the United Kingdom, Isle of Man and Channel Islands.

### **Aircraft kilometres**

Figures are calculated by multiplying the number of flights performed by the stage distance.

### **Passengers uplifted**

The figures are calculated by counting each revenue passenger on a particular flight (with one flight number) once only and not

repeatedly on each individual stage of that flight. A revenue passenger is defined as one who pays 25 per cent or more of the normal applicable fare.

### **Seat kilometres used**

The figures are calculated by multiplying the number of revenue passengers carried on each stage flight by the stage distance.

### **Cargo**

The weight of property carried on an aircraft including, for example, the weight of vehicles, excess baggage, diplomatic bags but excluding passengers' and crews' permitted baggage and mail.

### **Cargo (or mail) tonne kilometres used**

The figures are calculated by multiplying the number of tonnes of cargo and diplomatic bags carried on each stage flight by the stage distance. Mail tonne kilometres are calculated in a similar way.

### **Passenger tonne kilometres used**

These are calculated by multiplying the weight of passengers uplifted on each stage flight by the stage distance.

### **Shipping**

#### **Merchant vessels registered in the United Kingdom**

Trading vessels of 500 gross tonnes and over registered within the United Kingdom, the Channel Islands and the Isle of Man.

### **Bulk tanker and dry**

The following ship types are included:

Oil tankers, liquefied gas carriers, liquid chemicals and other specialised tankers; and dry bulk carriers including combined carriers (ore-oil and ore-bulk-oil carriers).

### **Other**

The following ship types are included:

General cargo roll-on/roll-off and lift-on/lift-off vessels, fully cellular container and part containerised ships, other specialised dry cargo vessels, cruise liners and other passenger carrying vessels.

### **Non-trading vessels**

The following vessel types are excluded:

Sailing ships, off-shore supply and support vessels, special service, tugs, fishing, research, dredgers/hoppers/barges, and naval auxiliary vessels.

### **Gross tonnage**

Gross tonnage is the total volume of all the enclosed spaces of a vessel. The unit of measurement is a ton of 100 cubic feet.

### **Deadweight tonnage**

Deadweight tonnage is the total maximum weight in tonnes that a ship can legally carry, that is, the total weight of cargo, bunkers, stores and crew.

## 14. RETAILING

### Retail sales and stocks

#### Sales

The monthly retail sales estimates, expressed as index numbers, cover the retail trades (excluding the motor trades) in Great Britain. The indices are compiled on a kind of business, rather than a commodity basis and take account of the results of the larger biennial inquiries into retailing for 1980 to 1986.

The statistics are based on returns from a voluntary panel of retailers and all sizes and types of retailers are represented including those trading by mail order. At present the panel consists of about 3,250 small retailers (with turnover less than £2 million in 1986) and about 350 large retailers who account for over 80 per cent of the total sales of all large retailers.

Contributing retailers report their total sales from all their outlets and by mail order. This means that the statistics include an allowance when shops are opened or closed by a contributor but it is not generally possible to make allowances when an existing retailer goes out of business or when a new retailer starts up. The statistics are inclusive of VAT, of services to customers (for example, repairs) and rentals received for goods (for example, television sets). Hire purchase and other instalment credit sales are valued at the credit price of the goods (that is including deposits and, where credit is provided by the shop, credit charges). Figures of credit sales relate only to the period during which the transactions took place; that is cash received from credit sales in previous periods is not included. Sales by chemists exclude receipts under the National Health Service. The statistics, being on a kind of business, and not on a commodity basis, do not cover sales of goods by establishments not classified to the kinds of businesses in the statistics; for example, they do not cover the sale of cigarettes in public houses or garages or the sale of goods in restaurants and cafes.

The basic estimates of the value of sales each month are constructed by comparison with the same month of the preceding year, 'chaining' back to 1986, the base year. However, the series is currently referenced to 1985 as 100. The series has been adjusted so that the index numbers for each kind of business agree with the estimates of the growth in turnover shown by the comprehensive retailing inquiries.

The latest summary statistics are published each month by *Press Notice*; detailed unadjusted statistics appear each month in *Business Monitor* SDM28 Retail Sales. A booklet *Monthly Retail Sales Inquiry — a summary of principles and procedures* giving more information on the construction of the Retail Sales Index is available from the Business Statistics Office, Newport, Gwent.

#### Stocks

Quarterly information on retailers' stocks is collected as part of the retail sales inquiry with the series being aligned to the book value of retailers' stocks collected in the annual retailing inquiries. The data collected relate to Great Britain, although an adjustment is made for Northern Ireland; published estimates relate to the United Kingdom. The reporting sample covers mainly large retailers, accounting for about one-third of retail stocks, although some smaller retailers also contribute to the inquiry.

## 15. EXTERNAL TRADE

### Visible trade on an Overseas Trade Statistics basis

The statistics of overseas trade are compiled from the declarations made to HM Customs and Excise by importers and exporters or their agents, which are subject to verification by customs officials. They comprise all merchandise imported into or exported from the United Kingdom, with the exception of the items mentioned below, (Coverage of statistics), whether or not the imports are intended at the time of importation for use in the United Kingdom or for re-export, and whether or not the exports are from Customs bonded warehouses. The statistics of imports, therefore, include British goods re-imported and goods imported for processing or for incorporation with other goods and subsequent re-exportation. This system is known as the 'general' system of recording trade statistics. Re-exports are not separately distinguished and are included with exports of United Kingdom produce.

### Definition of the United Kingdom

For the purposes of trade statistics 'United Kingdom' is defined as Great Britain, Northern Ireland, the Isle of Man, the Channel Islands and the Continental Shelf (United Kingdom part). The figures include the trade of the Channel Islands and the Continental Shelf (UK part) with overseas countries other than the United Kingdom, but exclude trade between the different parts of the United Kingdom.

### Commodity classification

The grouping of commodities in the *Monthly Digest* is based on the Standard International Trade Classification (Revision 3) of the United Nations, which replaced Revision 2 from 1 January 1988.

### Changes in the coverage

Changes in the coverage of the *Overseas Trade Statistics* are made from time to time, but as far as possible all earlier figures in the Digest are adjusted to conform to the coverage and definitions in operation in the latest period shown.

Low value imports and exports, other than parcel post and other than imports subject to excise duty, are aggregated under SITC (R2) or SITC (R3) sub-group 931.0 as 'special transactions and commodities not classified according to kind'. The level applied to low value trade is revised from time to time and currently applies to individual values of less than £600. This trade, accounting for a very small proportion of total trade, is not analysed either by commodity or country so that figures for individual commodity and country headings are deficient to the extent of these amounts.

Certain imports and exports used solely for servicing Continental Shelf installations are not classified by commodity but are similarly aggregated under SITC (R2) or SITC (R3) sub-group 931.0. Figures for trade in floating and submersible drilling platforms for Continental Shelf oil and gas operations, previously comprising SITC (R2) item 793.82 are included under SITC (R3) item 793.55 from January 1988.

### Coverage of the statistics

The following classes of goods are excluded from *Overseas Trade Statistics*:

- a. seagoing vessels and aircraft sold or purchased whilst abroad, details of which therefore have not been notified to Customs;

b. aircraft temporarily imported or exported for repair, maintenance or servicing without change of ownership;

c. banknotes after issue into circulation, being legal tender in any country; issued stock, share and bond certificates and similar titles of ownership;

d. goods benefitting from diplomatic and consular or similar immunity; gifts to a foreign head of state or to members of a foreign government or parliament; British government-owned stores exported for British government use overseas or returned from such use;

e. stores and equipment imported or exported by commonwealth and foreign government forces in the United Kingdom solely for their own use (including American Post Exchange Stores), and such stores and equipment re-exported;

f. stores and equipment exported for use by United Kingdom forces or returned from such use. (Stores shipped abroad for NAAFI, the YMCA and similar organisations are, however, included);

g. fish and other natural produce of the sea on first landing in the United Kingdom, after being taken by vessels of British registration;

h. stores and fuel as follows:

- (i) on board ships, aircraft and vehicles and intended for consumption en route,
- (ii) ships' and aircraft stores, unless ex-warehouse or subject to CAP requirements or licence, exported as cargo in transit to specific vessels or aircraft overseas;

i. personal and household effects; legacies;

j. temporary importations or exportations and subsequent return of the following:

- (i) precious stones for valuation, grading, etc., where ownership has not changed,
- (ii) goods, including works of art, intended for fairs and exhibitions,
- (iii) merry-go-rounds and other fairground attractions,
- (iv) professional effects (e.g. survey, film and radio equipment, tools of trade, theatrical effects, musical instruments and the like),
- (v) goods for technical examination and standards testing,
- (vi) commercial samples and advertising films,
- (vii) means of transport, containers and equipment connected with transport,
- (viii) packaging;

k. the following goods provided they are not the subject of a commercial transaction:

(i) printed advertising material, instructions for use, price lists,

(ii) ballast, dunnage, oil sludge and tank cleanings, waste for dumping at sea, and other goods which have become unusable or which cannot be used for industrial purposes;

l. from 1987 imports and exports of monetary and non-monetary gold (except for ores and concentrates).

### Parcel post

Imports and exports by parcel post are, generally speaking, included in Section 9 under the heading 'Postal packages not classified according to kind' (SITC (R3) sub-group 911.0). Consequently the figures for the descriptions of particular goods in the tables are deficient to the extent of the volume of this parcel post trade.

The figures for these imports and exports relate to goods sent through the Post Office as 'Parcel Post'; as a general rule they do not include packets sent by 'Letter Post' or by 'Printed Paper Post'.

### Period covered by the monthly Overseas Trade Statistics

In general, the figures show the trade as declared by importers and exporters on the completed documents received in the Statistical Office of HM Customs and Excise at Southend during a month.

Importers are usually required to present their documents before they can obtain Customs clearance and remove the goods. Further, the import figures include those recorded in documents lodged at the ports in the month, which reach Southend up to the third working day after the end of the month. The import figures therefore correspond fairly closely to goods actually imported during the calendar month.

Under the procedures for the control of exports, goods cannot be cleared for export until either a full entry or a simplified entry has been made. In the latter case, traders are allowed fourteen days after date of shipment within which to provide a complete export document. Moreover the processing of export documents begins shortly before the end of the calendar month. Thus the export statistics compiled for a month do not correspond with goods shipped in the calendar month.

### Quantities and values

Both quantities and values are based on the declarations of importers and exporters or their agents and may be verified by Customs officials. The present valuation code embodies the rules on Customs valuation forming the Agreement on Implementation of Article VII of the General Agreement on Tariffs and Trade. Information about the value for Customs purposes is given in Volume I, Part 14 of the Integrated Tariff of the United Kingdom.

#### a. Imports

For goods subject to duty *ad valorem* the statistical value is the same as the value for Customs purposes. This value is arrived at by the use of specified methods of valuation which have to be applied in strict hierarchical order. Thus if a value cannot be determined under the first method, the second is tried and so on. The first method is the 'transaction value' of the imported goods,



broadly the price paid or payable for those goods. The other methods are, in order of precedence, the transaction value of similar goods, the deductive method (value derived from the selling price of the goods in the country of importation) and computed value based on the built-up cost of the imported goods. (At the importer's request, the order of application of the last two methods, the deductive and computed value methods, can be reversed.) There is finally a fallback provision for those exceptional cases where none of the specified methods is practicable.

The 'place' for valuation purposes is the point where the imported goods are introduced into the Customs territory of the Community. This means that costs for delivery of the imported goods to that place have to be included in the Customs value irrespective of the valuation method appropriate to the importation. For conversion to sterling of an amount expressed in foreign currency a system of 'period rates of exchange' published by HM Customs and Excise is used.

For all other goods, i.e. goods free or exempted from duty and goods subject to a specific duty, the statistical value is to be determined in relation to the point at which the goods enter the United Kingdom. This means that the value includes freight, insurance and all other costs, charges and expenses incidental to the sale and delivery of the goods to the port or place of importation into the United Kingdom with the exception of any duty or tax chargeable in the United Kingdom. When the goods are re-imported after process or repair abroad the value to be declared must include the cost of the process or repair and the value of the goods when exported.

#### **b. Exports**

The values of exports are on an f.o.b. (free on board) basis, viz. the cost of the goods to the purchaser abroad, including packing, inland and coastal transport in the United Kingdom, dock dues, loading charges, and all other costs, profits, charges and expenses (for example, insurance) accruing up to the point where the goods are deposited on board the exporting vessel or aircraft or at the land boundary of Northern Ireland.

#### **Transit trade**

Goods in transit through the United Kingdom are not included in the statistics. Goods entered for transshipment may be either dutiable or free of duty, and either for removal from a vessel in one port and conveyance to another port for re-shipment abroad, or for removal under the same conditions from one vessel to another in the same port.

Goods transhipped under bond are to be distinguished from goods which are entered for storage in bonded warehouses and are afterwards exported therefrom, these latter goods being included in the figures of imports and exports under the 'general' system of recording.

#### **Seasonally adjusted figures of UK trade**

An explanation of the methods used to compute the seasonally adjusted figures was given in *Economic Trends*, February 1981.

Recent improvements are described in *Business Bulletin* 88/90 26 November 1990, 'Methodological issues re trade statistics'.

#### **Trade by countries and areas**

Particulars of imports are given according to the country from which the goods are consigned; this is the country from which the goods were originally despatched to the United Kingdom with

or without breaking bulk in the course of transport, but without any commercial transaction in any intermediate country. The country from which goods are consigned is not necessarily the country of shipment, origin or manufacture.

Particulars of exports are given according to the country of destination; this is the country which at the time of exportation is the final country to which the goods are being despatched from the United Kingdom. Exports of newly-built seagoing ships are normally classified as despatched to the country of registration.

Goods consigned direct to the United Kingdom from fishing vessels other than those of UK registration are classified as consigned from the country in which the vessel is registered.

#### **Grouping of countries**

The designations of countries and territories against which figures of overseas trade are presented are selected for statistical purposes and do not necessarily correspond to Customs areas, administrative areas or political units.

The areas used are defined as follows:

- i. European Community, comprising France, Belgium and Luxembourg, Netherlands, Federal Republic of Germany, Italy, Irish Republic, Denmark, Greece, Spain and Portugal.
- ii. Other Western Europe, comprising Iceland, Faroe Islands, Norway, Sweden, Andorra, Gibraltar, Vatican City, Malta, Yugoslavia, Turkey, Finland, Switzerland and Austria.
- iii. Eastern Europe and Soviet Union, comprising Poland, Czechoslovakia, Hungary, Romania, Bulgaria, Yugoslavia, Albania and Soviet Union.
- iv. United States of America.
- v. Other Organisation for Economic Co-operation and Development (OECD) countries, comprising Greenland, Canada, Ceuta and Melilla, Canary Islands, Japan, Australia and New Zealand.
- vi. Oil exporting countries, comprising Algeria, Libya, Nigeria, Gabon, Saudi Arabia, Kuwait, Bahrain, Qatar, Abu Dhabi, Sharjah, etc., Oman, Iraq, Iran, Brunei, Indonesia, Dubai, Trinidad and Tobago, Venezuela and Ecuador.
- vii. Other countries, i.e. all countries other than those listed above.

#### **Import and export volume index numbers**

The volume index numbers are designed to show movements in imports and exports after eliminating variations due to price changes. They are prepared by estimating what the value of the goods imported (or exported) in the current period would have been if their prices had been those of the base period. This estimate is then divided by the value of goods actually imported or exported in the base year; the indices thus give a measure of changes in the value of imports and exports at constant prices.

#### **Import and export unit value index numbers**

These index numbers are intended as guides to changes in the prices of imports and exports. They are not called price indices however, because they are calculated using unit values for each of a selection of commodities in the *Overseas Trade Statistics* instead of true price quotations.

The unit values are obtained by dividing the value of trade recorded in the month for each heading by a corresponding quantity (numbers, tonnes, etc.). As far as possible only those headings which cover a sufficiently homogeneous group of commodities for their unit values to move in much the same way as true prices are used in the calculation. The headings are chosen to give as wide and representative a coverage as possible; about 2300 unit values are calculated for each of exports and imports, covering in the 1985-based series about 70 per cent by value of total trade in each direction. The indices are constructed by weighting the growth in unit values by the value of trade in the base year.

An article describing the methodology used in calculating the 1985-based series was published in *British Business* on 2 September 1988.

### Visible trade on a balance of payments basis

The statistics of the value of imports and exports on a balance of payments basis are obtained by making various adjustments to the value of trade recorded in *Overseas Trade Statistics*. These adjustments relate to either the coverage of statistics or the valuation of items which are recorded. *Overseas Trade Statistics* includes, with a few exceptions, all goods entering or leaving the country whether or not their ownership changes and coverage adjustments are necessary to remove items where there is no change of ownership (for example, goods imported or exported and later returned to e.g. their original owner because the contract of sale is not completed) and to bring in items which are not included in *Overseas Trade Statistics* (e.g. new ships built and delivered abroad direct to UK owners). The main valuation adjustment is made to imports, which are valued c.i.f. in *Overseas Trade Statistics*, i.e. their value includes the freight and insurance costs of bringing them to this country; for balance of payments purposes these costs are deducted from the value of imports since freight and insurance payments to foreign companies are included in invisible items in the balance of payments and those to UK companies are regarded as domestic transactions. Other adjustments include, for example, for exports the addition of an allowance for the net under-recording of exports when necessary, and for both imports and exports, adjustments to exclude Forces parcels. These adjustments are described in greater detail in the annual Pink Book's *United Kingdom Balance of Payments*. The Pink Book also gives a more detailed breakdown of the value of the adjustments.

The import and export unit value and volume index numbers for commodity groups are calculated from the data recorded in *Overseas Trade Statistics*. In order to provide index numbers comparable with the statistics of the value of trade on a balance of payments basis, index numbers are also constructed for total imports and exports on a balance of payments basis.

The terms of trade series is derived by dividing the total export unit value index by the total import unit value index, both being on a balance of payments basis.

### Import penetration and export sales ratios for the products of manufacturing industry

The measures of import penetration and export sales ratios comprise the following:

- Ratio 1 Imports/Home demand
- Ratio 2 Imports/Home demand *plus* exports
- Ratio 3 Exports/Manufacturers' sales
- Ratio 4 Exports/Manufacturers' sales *plus* imports

The ratios, based on current price data and available for more than two hundred sectors of manufacturing industry, were introduced in the August 1977 issue of *Economic Trends*. That issue also included notes on the conceptual and measurement problems involved in constructing the figures. Only one major methodological change has taken place since the ratios were first published. For ratios classified according to the Standard Industrial Classification (1980) second-hand goods and waste products have been excluded from the trade figures throughout; previously, on the 1968 classification, only trade in second-hand ships, aircraft, and aero-engines was excluded. This change was made in order to make the trade figures more comparable with the sales figures used in calculating the ratios.

The ratios are better suited to indicating changes in performance over time than to assessing absolute levels. (The figures are, therefore, not suitable for making comparisons between the performances of different industries or for comparing the performance of UK industry with that of another country.)

To an extent the four ratios complement each other, but one measure of import penetration or export performance may be more appropriate than the other in a particular circumstance. A simple rule is that where the questions posed are 'what proportion of the UK market for a particular product is taken by imports?' or 'what proportion of their output or sales do manufacturers export?', Ratios 1 and 3 are appropriate. Where, however, the question is directed at the import/export performance of an industry it is more relevant to take into account both imports and exports in the calculation of each ratio and to use Ratios 2 and 4.

Nevertheless, given the general guidelines, it is important to be aware of the advantages and defects of the different measures. The simpler measures (1 and 3) are in particular subject to distortion since for several industries there is a significant volume of imports for re-export which, because it is not possible to distinguish imports for UK consumption separately, exaggerate both import penetration and the percentage of manufacturers' sales exported. The inclusion in the trade figures of goods exported and subsequently re-imported has a similarly distorting effect. Another disadvantage of the pair of simple ratios is that they cannot, in theory, be directly related to each other when trying to assess whether import penetration has risen faster than export performance. This is often a consideration in longer-term studies since both import penetration and export shares have tended to increase with the growth in world trade.

Ratios 2 and 4 suffer less from the disadvantage of the inclusion of re-exports and re-imports because trade in the other direction is included in the denominator. Furthermore, since they have an identical denominator (home demand *plus* exports = manufacturers' sales *plus* imports) absolute difference between different years can be compared directly. Thus Ratio 4 *less* Ratio 2 represents the crude trade gap for the particular sector proportionate to its size, and is a useful comparison for assessing an industry's overseas trade performance over time.

It is important to note that, unlike the other tables on external trade, these figures are based on the Standard Industrial Classification (1980). Further, they do not relate to the total sales, imports and exports of an industry but to the sales, imports and exports of the goods that are principal products of the industry. Thus the sales of the food and drink industry exclude goods produced by this industry, but principally produced elsewhere, and include goods produced by other industries, but principally produced in the food and drink industry.

For certain products the calculation of the ratios is either inappropriate (e.g. electrical equipment installation), or suitable data for one or more of the underlying series (i.e. manufacturers' sales, imports or exports) is not available. In such cases the ratios would not be meaningful and the products are excluded from the analysis.

The ratios for the full detail within manufacturing are shown in *Business Monitor* MQ 12 published quarterly by HMSO. The latest ratios to be published are for the second quarter of 1989. Further quarterly calculations on the same basis will not be made since the implementation of the recommendations made in the 1989 Review of DTI Statistics mean that quarterly sales data for most industries, which are used in the calculation of the ratios, are no longer available. The underlying series for imports and exports classified to the Standard Industrial Classification are published quarterly in *Business Monitor* MQ 10.

An article 'Manufacturing industry in the seventies: an assessment of import penetration and export performance' in the June 1980 edition of *Economic Trends*, discussed the trends in these figures and presented the annual ratios from 1970 to 1979.

## 16. OVERSEAS FINANCE

### Balance of payments

The items in this table are more fully defined in *United Kingdom Balance of Payments 1989 edition* - the CSO Pink Book (HMSO 1989).

### Current account

#### Exports f.o.b. and imports f.o.b.

The *Overseas Trade Statistics of the United Kingdom* are the basis of the balance of payments figures, but certain adjustments are made in respect of valuation and coverage. The principal adjustment is the deduction of freight and insurance from the Trade Statistics figures of imports.

#### Visible balance

Exports f.o.b. less imports f.o.b.

#### Invisible balance

The net total of all invisible transactions, comprising:

##### Services

UK government current expenditure and receipts not appropriate to visible trade or other invisible transactions; sea transport; civil aviation; travel; financial and other services (the net service earnings of UK financial and allied institutions and consultancy firms, and also including commissions, advertising, royalties, education, overseas governments' expenditure in the United Kingdom and services associated with exploration for, and production of, oil and natural gas).

##### Interest, profits and dividends

Income on direct investment (whether remitted or retained for reinvestment) portfolio investment and interest on all other external assets and liabilities.

### Transfers

UK government transfers include grants overseas, subscriptions and contributions to and grants from international organisations (including European Community institutions). Private transfers include payments to overseas dependents and the value of gifts and charitable donations.

## UK External assets and liabilities

### Transactions in external assets

#### UK Investment overseas

##### Direct investment

This comprises mainly net investment by UK companies in their overseas branches, subsidiaries and associates, including the reinvestment of retained profits. Transactions of a number of public corporations are included but those of government departments are excluded. The figures also include real estate transactions by non-bank financial institutions and persons and loans and mortgages to overseas residents by non-bank financial institutions.

##### Portfolio investment

Covers purchases net of sales of overseas government, municipal and company securities of all types, including both long-term bonds and shares. It does not include transactions in short-term securities, which form part of other capital transactions, below.

#### Lending etc. to overseas residents by UK banks

From 1979 this item covers external lending in foreign currencies and sterling including that related to export credit. Prior to 1979 the figures only cover lending in sterling and certain long-term export credit extended in foreign currencies; other foreign currency transactions being recorded on a net basis under liabilities.

#### Deposits and lending overseas by UK residents other than banks and general government

Includes deposits with banks in the International Monetary Fund (IMF) reporting area supplemented by fiduciary accounts with Swiss banks and deposits with branches of US banks in Panama. Also included are transactions of the Commonwealth Development Corporation, advance and progress payments on imports and other overseas lending and short-term assets. Until end-1982, when the information ceased to be available, net export credit extended to overseas firms by unrelated UK firms is also included.

#### Official reserves

Drawings on (+) / additions to (-) the official holdings of gold, Special Drawing Rights, European Currency Units and convertible currencies and changes in the UK reserve position in the IMF. Drawings on / additions to the official reserves are valued in sterling at market related rates of exchange.

#### Other external assets of central government

Comprises mainly inter-government loans made by the UK, subscriptions to international lending bodies, other than the IMF, and export credit taken over by the Export Credits Guarantee Department (ECGD) from UK banks and suppliers following the settlement of insurance claims together with such credit acquired by the ECGD from UK banks under refinancing arrangements.

### Transactions in external liabilities

#### Overseas investment in the United Kingdom

##### Direct investment

Comprises mainly net investment by overseas companies in their branches, subsidiaries or associated companies in the United Kingdom including the reinvestment of retained profits. Also covered are miscellaneous property investments in the United Kingdom by overseas residents.



#### *Portfolio investment*

Comprises net investment by overseas residents in British government stocks, British government foreign currency bonds and notes, local authorities' and public corporations' securities and UK company securities (including securities issued abroad).

#### **Borrowing etc. from overseas residents by UK banks**

Covers foreign currency and sterling borrowing and deposits liabilities abroad. Prior to 1979, however, foreign currency borrowing is recorded net of foreign currency lending abroad; subsequently this lending is recorded under transactions in assets.

#### **Borrowing from overseas by UK residents other than banks and general government**

Transactions with banks abroad, covering predominantly borrowing from commercial banks in the reporting area covered by the IMF and borrowing from the European Investment Bank and the United States of America's Export-Import Bank. Also included are identified trade credit between unrelated companies (advance and progress payments on exports and import credit) and other liabilities including short-term transactions of investment and unit trusts and, from the beginning of 1982, miscellaneous financial institutions' transactions with non-banks abroad.

#### **Other external liabilities of general government**

Covers transactions with the International Monetary Fund, borrowing from other monetary authorities, inter-government loans to the United Kingdom and foreign currency borrowing from banks overseas. Also included are sterling borrowing from and deposit liabilities to banks, etc., overseas by local authorities, overseas holding of Treasury bills and non-interest bearing notes issued by HM Government together with official short-term transactions.

#### **Balancing item**

Represents the net total of errors and omissions in other items in the current and capital accounts.

## **17. HOME FINANCE**

#### **Central government funds and accounts transactions**

This table is a summary of receipts and payments on the Consolidated Fund and the National Loans Fund and changes in balances on the National Insurance Fund and certain other central government funds and accounts. The net result is the amount the Government needs to borrow, i.e. the central government borrowing requirement. The operation of the Consolidated Fund is governed by the Exchequer and Audit Departments Act, 1866 (as amended by the National Loans Act, 1968) which provides that gross tax revenue (less repayments) and all other public monies payable to the Exchequer shall be paid into 'The Account of Her Majesty's Exchequer'. The Consolidated Fund is at any point of time the amount standing to the credit of this Exchequer Account which is held at the Bank of England.

The National Loans Act, 1968 provides that all money raised by the creation of debt is payable into the National Loans Fund together with receipts representing repayments of loans made by the State from the Fund and interest on those loans. The majority of government lending is made from the National Loans Fund which is thus the channel through which pass all the government's

borrowing transactions and most of its domestic lending transactions. (Loans charged on Votes continue to be met from the Consolidated Fund.) Further details can be found in Table 3.12 of *Financial Statistics*.

#### **Public sector borrowing requirement**

The public sector borrowing requirement (PSBR) indicates the extent to which the public sector borrows from other sectors of the economy and overseas to finance the balance of expenditure and receipts arising from its various activities. The PSBR can be defined in terms of the receipts and expenditure of the consolidated public sector accounts, but it is usually more helpful to consider it in terms of the borrowing requirements of the sub-sectors of the public sector: central government, local authorities and public corporations.

The table shows the contributions by the three sub-sectors and an analysis by broad sector providing the funds. The total PSBR is also shown seasonally adjusted constrained to financial year totals. Further details can be found in Tables 2.5 and 2.6 of *Financial Statistics*.

#### **Selected financial statistics**

This table shows a selection of financial statistics. Further details are to be found in *Financial Statistics*.

#### **Money stock and liquidity**

There is no single, universally accepted, definition of money. Any single definition must be, to some extent, arbitrary; a range of monetary aggregates is therefore produced reflecting different bands on the spectrum of liquidity.

The current definitions of the monetary aggregates M0, M2, M4 and M5 are detailed below. M3 formerly known as £M3, ceased to be published (along with M1 and M3c) from July 1989 following Abbey National Building Society's conversion to a public limited company (see *Bank of England Quarterly Bulletin August 1989*). NIB M1 (a measure of transactions money) ceased to be published in November 1990.

M0 comprises notes and coin in circulation outside the Bank of England plus bankers' operational balances with the Bank. For the major components of M0, the level for each month is the average of the levels on all the Wednesdays of that month, and the change is the difference between those average levels (adjusted for any breaks in series).

M2 incorporates notes and coin in circulation with the public plus sterling retail deposits held by the UK private sector (other than banks and building societies) with banks (comprising the UK offices of all institutions authorised to take deposits under the Banking Act, 1987, the Banking Department of the Bank of England and those institutions in the Channel Islands and Isle of Man which opted to adhere to the monetary control arrangements introduced in August 1981) and building societies.

M4 is made up of notes and coin in circulation with the public, together with all deposits (including certificates of deposit and other short-term paper) with banks and building societies denominated in sterling and held by the UK private sector (other than banks and building societies).

M5 is equal to M4 plus non-bank non-building society private sector holdings of certain money market instruments, certificates of tax deposit and some National Savings instruments.

For further details see the *Bank of England Quarterly Bulletin* March 1981, June 1982, December 1982, March 1983, March 1984, May 1987, and August 1990. A fuller analysis of the figures is shown in *Financial Statistics* and in the *Bank of England Quarterly Bulletin*, which also presents figures on M4c which includes private sector foreign currency deposits with banks and building societies.

Details of breaks in monetary series are described in Technical Series paper No. 23 entitled 'Breaks in Monetary Series' published by the Bank in February 1989. An analysis of 'Monetary Aggregates in a changing environment' was published by the Bank in their Discussion Paper No. 47 in March 1990.

In the seasonally adjusted data, the adjustments are generally constrained to sum to zero over the financial year. (For further information on seasonal adjustments see page 30 of *United Kingdom Flow of Funds Accounts: 1963-1976*, published by the Bank of England in May 1978, the *Bank of England Quarterly Bulletin* June 1983, December 1986 and February 1989 and also the background note published with the October 1989 monetary statistics.) Further information on seasonal adjustments is due to be published in the February 1991 *Bank of England Quarterly Bulletin*, and in a subsequent Technical Paper.

#### Selected interest rates, exchange rates and security prices

Details of the series may be found in *Financial Statistics*.

## 18. PRICES AND WAGES

### Retail prices index

The retail prices index measures the percentage changes month by month in the average level of prices of the commodities and services purchased by the great majority of households in the United Kingdom, including practically all wage earners and most small and medium salary earners. The weights used for combining the indices for the various groups of items are revised annually on the basis of information from the *Family Expenditure Survey* for (generally) the year ended in the previous June.

The index is calculated monthly in respect of a Tuesday near the middle of each month.

Expenditure covered by the index does not include income tax payments, national insurance contributions, savings or investments (e.g. pension contributions and the capital element of mortgage payments for house purchase), gifts and donations which are not made in return for any specific service (e.g. church collections) and expenditure for which no 'unit of purchase' can be identified for purposes of price collection (e.g. on betting).

For expenditure coming within the scope of the index a representative list of items has been selected and the prices of these items are collected each month. Quotations are obtained from retail outlets typical of those from which the majority of households make their purchases, in some 180 urban and rural centres throughout the United Kingdom. The prices used are the prices actually charged. So far as possible they relate to goods of unchanged quality at successive dates.

The method of construction of the RPI is described in an article in *A Short Guide to the Retail Prices Index*. (HMSO £2.50). Reference may also be made to reports of the RPI (formerly Cost of Living) Advisory Committee (Cmnd. 7077, Cmnd. 8328, Cmnd. 8481, Cmnd. 9710, Cmnd. 1657, Cmnd. 3677, Cmnd. 4749, Cmnd. 5905, Cmnd. 9848, Cmnd. 644, Cmnd. 1156) and *Employment Gazette*, February 1978.

### Family Expenditure Survey (FES)

The notes below relate to the tables in the *Annual Abstract of Statistics* and in *Regional Trends* (formerly *Regional Statistics*). The FES covers all types of private households in the United Kingdom. It is a continuing survey in which nearly 11,000 addresses (over 12,500 from 1986) are selected annually. From these an effective sample of some 10,400 households is obtained, of which around 70 per cent co-operate. Results of the survey are published in annual *Family Expenditure Survey Reports* (HMSO), together with a list of definitions and items on which information is collected.

The principal survey results (both annually and quarterly) are featured in the Department of Employment's *Employment Gazette*, while detailed information on the conduct of the survey is provided by the technical handbook 'Family Expenditure Survey Handbook - Sampling, Fieldwork, Coding Procedures and Related Methodological Experiments' (HMSO). A comprehensive guide to the survey is also given in a published leaflet, revised in July 1986 and entitled 'Family Expenditure: a Plain Man's Guide to the FES', available on application from the Central Statistical Office (01-273 5063 or 01-273 5066).

Changes made in definitions from year to year may affect annual comparisons. A list of the main changes is set out in each annual report together with the years in which they became effective. A summary of the main definitions in current use is given in the following paragraphs.

#### Household

The FES is strictly a household inquiry. The household is defined as including all those who live at the same address and who share common catering facilities. The members of a household thus defined are not necessarily related by blood or marriage. Resident domestic servants are included. As the survey covers only private households, people living in hostels, hotels, boarding houses or institutions are excluded.

#### Household income

Household income is the aggregate of the gross incomes of the individual members of the household before deduction of income tax, national insurance contributions and any other deductions at source, (see also *Housing expenditure* below). Income as thus defined excludes money received by one member from another member of the household, proceeds from the sale of cars, furniture or other capital assets, and receipts from legacies, maturing insurance policies and windfalls. With the exceptions of luncheon vouchers and an imputed amount for owner-occupied and rent-free accommodation, income in kind is also excluded.

#### Expenditure

Expenditure is taken as representing current expenditure on goods and services. It excludes savings or investments (e.g. purchase of national savings certificates or shares; life assurance premiums; contributions to pension funds). Income tax payments and national insurance contributions, and mortgage and other payments for purchase of or major additions to dwellings are also excluded. Special procedures are applied to purchases under hire purchase and other credit arrangements.



### Housing expenditure

Housing expenditure of households living in unfurnished or furnished rented dwellings consists of the payments by such households for rent, rates, water and any insurance of the structure. For households living in rent-free accommodation housing expenditure is estimated in the same way as for rented dwellings except that a notional amount of rent based on the rateable value of the accommodation is included. Expenditure of households living in their own dwellings consists of the payments by these households for rates, water, ground rent and insurance of the structure, together with the weekly equivalent of the rateable value of the dwelling.

From 1984 the basis of compiling housing expenditure in the FES changed. The 1983 FES Report (paragraph 3 of the Introduction) described in detail the effect of the introduction from November 1982 of the Housing Benefit Scheme which resulted in certain transactions (previously recorded in cash terms) not being shown in the survey results, leading to identically reduced levels of recorded income and recorded expenditure. An attempt was made with the 1983 survey results to preserve continuity with 1982 but it is now accepted that it is not possible to fully adjust the 1983 results so that they are on a consistent basis with those for 1982. Thus the published results for 1982, 1983 and 1984 for gross income, total expenditure and housing expenditure are not comparable.

### Persons working

These are persons aged 16 or more in the following categories:

employees at work - those gainfully employed or absent on holiday only;

employees temporarily away from work - those with a job to go to but absent from it for a reason other than holiday;

employees out of a job - those who have left a job for up to one year through sickness or other reason, but who indicate that they intend to seek work;

self-employed, except those earning minimal amounts from part-time work.

(The definitions in this paragraph incorporate minor changes introduced in 1982 and explained in the *FES Annual Report for 1982*.)

### Purchasing power of the pound

Changes in the internal purchasing power of a currency may be defined as the 'inverse' of changes in the levels of prices; when prices go up, the amount which can be purchased with a given sum of money goes down. From January 1962 onwards, movements in the internal purchasing power of the pound are based on the Retail Prices Index (RPI). If the purchasing power of the pound is taken to be 100p in a particular year, the comparable purchasing power in a subsequent year is:

$$\frac{100 \times \text{average price index for earlier year}}{\text{average price index for later year}}$$

A long series on the purchasing power of the pound back to 1914, the latest information and a detailed explanation of the estimation of changes in the purchasing power of the pound are given in 'The

*Internal Purchasing Power of the Pound*, a leaflet obtainable from the Press and Information Section, Central Statistical Office, Great George Street, London SW1P 3AQ.

### Tax and price index

The purpose and methodology of the Tax and Price Index (TPI) were described in an article in the August 1979 issue (No. 310) of *Economic Trends* (HMSO 1979). The TPI measures the increase in gross taxable income needed for taxpayers to maintain their purchasing power, allowing for changes in retail prices. The TPI thus takes account of changes to direct taxes (including employees' national insurance contributions) facing a representative cross-section of taxpayers, as well as changes in the retail prices index (RPI).

### Coverage

Non-taxpayers and those with incomes over £33,730 a year at January 1990 are excluded from the TPI. Non-taxpayers are excluded because the RPI, or the associated indices for pensioner households, already provide a measure of the change needed to maintain the purchasing power of their incomes. Those with high incomes are excluded because the changes in their tax liabilities are not necessarily representative of the majority of taxpayers, and because broadly the same percentage (the top four per cent) is already excluded from the households on whose expenditure patterns the RPI is based. Otherwise everybody is included, whether working, unemployed or retired, so long as they pay tax. Non-taxable income, such as child benefit, is excluded from the TPI, and for consistency, so are the child tax allowances and taxed family allowances of earlier years.

From February 1987 onwards, housing benefit is included in the income base for calculating the TPI because of changes made to the RPI as a result of the RPI Advisory Committee's recommendations. The RPI now reflects changes in gross housing costs which, for a substantial minority of taxpayers, are partially offset by receipts of housing benefit.

The TPI reflects changes in people's tax and national insurance contributions liabilities. If the index were instead to reflect actual payments it would be subject to highly erratic movements, which would be difficult to interpret and could be misleading.

### Calculation of the TPI

The current composition and distribution of gross taxable incomes are estimated from Inland Revenue's Survey of Personal Incomes (SPI). After excluding those with high incomes, the sample comprises some 32,000 tax units (tax units are either single people or married couples). The gross income used in the calculation of the index is the taxable income of these tax units, i.e. their pay, self-employment income, pensions, taxable benefits and investment income. The estimated gross income, and tax liability, of each sample tax unit at the turn of the calendar year forms the basis of the TPI.

### The Survey of Personal Incomes

This survey consists of a stratified sample of all tax units about whom information is available to the local offices of the Inland Revenue.

The survey results are normally available in the summer a year after the end of the financial year to which they refer.

This means, for example, that the calculation of the TPI throughout 1990 had to be based on the 1987/88 SPI.

Inland Revenue produce estimates of the distribution of gross incomes at the turn of the calendar year by projecting forward the incomes of each sample tax unit. Different projection factors are applied to income from each source, these factors being derived from aggregate data on incomes. The change in total tax liability resulting from any uniform increase in gross incomes can be estimated from this. So the change in gross income needed to offset a particular RPI increase can be found.

#### **Budgets**

At the time of a Budget the movement of the TPI relative to the RPI depends on the changes made to direct taxes and employees' national insurance contributions. Between Budgets the monthly change in the TPI is normally slightly larger than that in the RPI (a more than proportionate increase in gross income being needed to offset any rise in prices, since all the extra income is fully taxed). However, it is the changes over 12 months which should be the focus of interest.

#### **Index numbers of producer prices**

The producer price index was published for the first time in 1983, replacing the former wholesale price index. Full details of the differences between the two indices were given in an article in *British Business*, 15 April 1983. The producer price index is compiled according to the same general methodology as the wholesale price index: a comprehensive guide to the method of calculation of the wholesale price index entitled *Wholesale price index: principles and procedures* is published by the Government Statistical Service and is available from HMSO, price £5.60.

The producer price index is calculated from the price movements of about 10,000 closely-defined materials and products purchased and manufactured by UK industry. It is a base-weighted index resting on the 'basket of goods' concept, and regular five-yearly rebasings are carried out in order to reflect the changing patterns of industry's sales and purchases in the index weights. The latest rebasing switches the index to a 1984 base with 1985 = 100 from its former 1979 base with 1980 = 100. Thus the fixed weights used to combine product indices into broader aggregates now reflect the pattern of transactions in 1984, the latest year for which the full range of information required for weighting purposes is available. The reference year has been chosen as 1985 in order to fit in with the national accounts system.

The index numbers shown in Table 18.6 are constructed on a net sector basis - ie the index for any sector relates only to transactions between that sector and other sectors: within-sector sales and purchases are excluded. For example, the index for materials and fuel purchased by manufacturing industry is designed to reflect only changes in the prices of purchases that manufacturing industry taken as a whole obtains from the UK non-manufacturing sector and from abroad: it does not reflect changes in the prices of purchases from within the UK manufacturing sector. A consequence of the net sector approach is that index numbers for the whole of manufacturing are not weighted averages of sector index numbers.

The indices relate to average prices for a month. The full effect of a price change occurring part-way through any one month will only be reflected in the index for the following month. The index numbers are compiled exclusive of value-added tax. Excise duties (on cigarettes, manufactured tobacco and alcoholic liquor) are included, as is the duty on hydrocarbon oils.

#### **Construction output price index**

The index relates to quarterly changes in the price of new building and civil engineering work done in Great Britain, excluding repairs and maintenance. It is a base-weighted combination of the separate prices indices for contractors' output in five work sectors. A description of the methodology of the indices was given in *Economic Trends* No. 297, July 1978.

#### **Index numbers of the average price of new dwellings for private owners**

The index is compiled from information provided by a panel of building societies, and the Abbey National plc (which ceased to be a building society in July 1989). Each society completes a return, every month, showing the number and total purchase price of dwellings mortgaged. Separate figures are provided for new and other dwellings; and for mortgage at approval and completion stages. The approval stage figures provide the more up-to-date indicator of price trends whereas the series based on completions gives more accurate figures for dwellings actually purchased because a small, but significant, number of mortgages approved do not result in completed transactions. The types, sizes, location and nature of the title of dwellings may vary from quarter to quarter. The index gives an indication of the changes in the price of new dwellings but not changes in the cost of building.

#### **Average weekly earnings and hours worked in manufacturing and certain other industries**

The industries covered are manufacturing industries, construction, electricity, gas, other energy and water and transport and communication (except sea transport). The figures are based on returns from employers showing, for a particular week in October, the number of manual employees actually at work, for at least part of the reference week, their aggregate earnings and the total number of hours worked. The returns cover about 2¼ million manual workers, but in calculating the general averages the figures for individual industries have been weighted on the basis of the estimated number of manual workers employed in each industry.

Percentage changes in average earnings represent the combined effect of a number of factors, including (a) increases in rates of wages; (b) changes in the number of hours actually worked and in the proportion of hours paid for at overtime, weekend and night-shift, etc. rates; (c) extensions of systems of payment by results in some industries, and increased output by the workers affected and (d) changes in the relative numbers of employees in different grades, occupations and industries.

Separate figures are calculated distinguishing males and females, (except for postal services and telecommunication), for those paid on adult rates and other rates, and for the various standard regions. They are published in the *Employment Gazette*, usually in the April issue along with information on earnings in certain industries not covered by these surveys, e.g. coal mining and agricultural workers.

#### **Index of average earnings of all employees (monthly inquiry)**

The whole economy series of average weekly earnings in Great Britain was introduced in January 1976. The present series is based on average 1988 = 100 and is available on this basis back to January 1988. It was described in the November 1989 issue of *Employment Gazette*. Indices are given for 25 industry groups of the Standard Industrial Classification (1980), all manufacturing industries, production industries, all service industries and the whole economy. For the last four indices, actual and seasonally adjusted figures are given, together with percentage changes over the previous

12 months for seasonally adjusted and underlying average earnings. The underlying average earnings index for the whole economy is published in the Employment Topics Section of the March, June, September and December editions of the *Employment Gazette*, and described in detail in the November 1989 edition of the same journal.

### **Indices of producer prices of agricultural products and of the means of agricultural production**

The monthly and annual index numbers of agricultural prices in the United Kingdom cover all the main agricultural products and also the main groups of materials currently consumed by agriculture. The indices are currently based on the calendar year 1985. They are designed to provide short-term and medium-term indications of movement in these prices. All annual series are base-weighted Laspeyres type, using value weights derived from the Economic Accounts for Agriculture 1985 prepared for the Statistical Office of the European Community. Monthly indices for purchase prices and non-seasonal product prices are calculated using annual weights and base prices calculated as simple averages of the monthly prices in the calendar year 1985. Monthly indices for seasonal product prices are calculated using a monthly weight which is the annual weight of the product evenly distributed over its trading months. The base prices used are simple averages of the monthly prices over the trading months in 1985. Prices are measured exclusive of VAT. For practical reasons, it has generally been necessary to measure the prices received by producers (outputs) at the first marketing stage and prices of materials (inputs) ex-supplier.

The construction of the indices enables them to be combined with similar indices for other member countries of the European Community to provide an overall indication of price trends within the Community which appears in the Community's Eurostat series of publications.

Index numbers at a more detailed level and for earlier based series are available from the Ministry of Agriculture, Fisheries and Food, Stats (C+P)A, Room A509, Government Buildings, Epsom Road, Guildford, Surrey GU1 2LD.

## **19. LEISURE**

### **Broadcast receiving licences current**

These figures are compiled by the Post Office and represent the total number of annual licences in force at the end of the period. They include about 40,000 licences issued at a reduced fee to the blind but exclude an estimated 600,000 households covered by accommodation and residential care licences.

### **Earnings and Expenditure on tourism and travel**

Table 19.2 shows estimates of United Kingdom earnings from overseas visitors, and expenditure by UK residents on visits abroad. The estimates do not include payments for air and sea travel to and from the United Kingdom, but cover only expenditure by overseas residents while in the United Kingdom, and by UK residents while abroad. Personal exports of cars and other items not taken out of the country as personal baggage, expenditure in UK duty free shops and on board UK ships and planes are not included in the estimates. The value of these items is included in the Overseas Trade Statistics.

An 'overseas visitor' is defined as someone who is permanently resident in a country outside the United Kingdom and who visits the United Kingdom for a period of less than 12 months. UK citizens resident overseas for 12 months or more coming home on leave are included in this category. Similarly, visits abroad are visits for a period of less than 12 months by people permanently resident in the United Kingdom (who may be of foreign nationality).

The information in the table is largely from the International Passenger Survey (IPS), a sample survey of passengers entering and leaving the United Kingdom through the principal air and sea routes other than those to the Irish Republic. The estimates are therefore subject to sampling error.

The IPS estimates are supplemented by information about Irish traffic obtained from the CSO in Dublin.

## **20. WEATHER**

### **Air temperature**

Between January 1974 and December 1983, averages of air temperature for 1941-70 were used as standards for comparison. These were replaced in January 1984 by the averages for 1951-80, the average at each station having first been reduced to sea level by adding 0.6 celsius for 100m above sea level. The monthly and annual values of mean daily air temperature at sea level for individual years are estimates obtained by calculating the means of the differences from the long-period averages at 62 stations in England and Wales, 27 in Scotland and 7 in Northern Ireland and adding these mean differences algebraically to the long-period averages for the territories concerned.

### **Rainfall**

Averages of areal rainfall for 1941-70 are used. The values for individual years are estimates obtained by calculating the means of the percentages of the average for about 3,500 stations in England and Wales, 1,200 in Scotland, and 250 in Northern Ireland. These mean percentage values are then applied to the average in millimetres for the respective territories. The procedure is carried out each month, and the monthly totals summed to give values for the year.

### **Sunshine**

Averages of bright sunshine for 1951-80 are used as standards for comparison. The mean daily amounts of sunshine for individual years are estimates obtained by calculating the means of the percentages of the average for 57 stations in England and Wales, 23 in Scotland and 7 in Northern Ireland, and applying these mean percentage values to the long-period averages for the respective territories.

Further details on weather statistics and particulars of longer series of values may be obtained from Meteorological Office Commercial Services, Room 228, London Road, Bracknell, Berkshire RG12 2SZ.

### **Conversion factors**

#### **Temperature**

To convert degrees celsius into degrees fahrenheit:  
multiply by 9, divide by 5, and add 32.

#### **Rainfall**

1 millimetre = 0.0394 inch.



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# APPENDIX

## Standard regions for statistical purposes

The boundaries of the Economic Planning Regions in England were adjusted on April 1 1974 to take account of local government reorganisation under the Local Government Act, 1972. It has been decided that the standard regions for statistical purposes will coincide with the revised Economic Planning Regions. The lists below give definitions of the standard regions for statistical purposes on both the boundaries of 31 March and 1 April 1974. *Statistical News* No. 27, November 1974 (HMSO) contains an article and a map relating to these boundary changes.

### Standard regions at 31 March 1974 (1)

#### North

Cumberland, Durham, Northumberland, Westmorland and the North Riding of Yorkshire.

#### Yorkshire and Humberside

The East and West Ridings of Yorkshire (including City of York) and Lincolnshire (Parts of Lindsey excluding Lincoln C.B.).

#### East Midlands

Derbyshire (except the High Peak District, which is included in the North West Region), Leicestershire, Lincolnshire (Part of Holland, Parts of Kesteven and Lincoln C.B.), Northamptonshire, Nottinghamshire and Rutland.

#### East Anglia

Cambridgeshire, and Isle of Ely, Huntingdon and Peterborough, Norfolk and Suffolk.

#### South East

Bedfordshire, Hertfordshire, Essex, Berkshire, Buckinghamshire, Oxfordshire, London (Greater London Council area), Kent, Surrey, Sussex, Hampshire, Isle of Wight and the Borough of Poole.(3)

#### South West

Cornwall (including the Isles of Scilly), Devon, Dorset (excluding the Borough of Poole (3)), Gloucestershire, Somerset and Wiltshire.

#### West Midlands

Herefordshire, Shropshire, Staffordshire, Warwickshire and Worcestershire.

#### North West

Cheshire, Lancashire and the High Peak District of Derbyshire (the Boroughs of Buxton and Glossop, the urban districts of New Mills and Whaley Bridge and the rural district of Chapel en le Frith).

#### Wales

The whole of Wales.

#### Scotland

The whole of Scotland.

#### Northern Ireland

Antrim, Down, Armagh, Fermanagh, Tyrone, Londonderry, Belfast C.B., Londonderry C.B.

### Standard regions at 1 April 1974 (1) (2)

#### North

Tyne and Wear\*, Cleveland, Cumbria, Durham, Northumberland.

#### Yorkshire and Humberside

South Yorkshire\*, West Yorkshire\*, Humberside, North Yorkshire.

#### East Midlands

Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire.

#### East Anglia

Cambridgeshire, Norfolk, Suffolk.

#### South East

Greater London\*, Bedfordshire, Berkshire, Buckinghamshire, East Sussex, Essex, Hampshire, Hertfordshire, Isle of Wight, Kent, Oxfordshire, Surrey, West Sussex.

#### South West

Avon, Cornwall, Devon, Dorset, Gloucestershire, Somerset, Wiltshire.

#### West Midlands

West Midlands\*, Hereford and Worcester, Shropshire, Staffordshire, Warwickshire.

#### North West

Greater Manchester\*, Merseyside\*, Cheshire, Lancashire.

#### Wales

The whole of Wales: Clwyd, Dyfed, Gwent, Gwynedd, Mid Glamorgan, Powys, South Glamorgan, West Glamorgan.

#### Scotland

The whole of Scotland: Highlands, Grampian, Tayside, Fife, Lothian, Borders, Central, Strathclyde, Dumfries and Galloway and Islands (Orkney, Shetland and the Western Isles).

#### Northern Ireland

Antrim, Down, Armagh, Fermanagh, Tyrone, Londonderry, Belfast C.B., Londonderry C.B.

Regional figures for unemployment up to 1983 are built up by aggregating the appropriate local employment office areas. The boundaries however, do not in all cases agree precisely with county or regional boundaries. From 1984 the data are based on electoral wards - see supplement to the September 1984 edition of *Employment Gazette*.

(1) The lists are classified according to local authority areas in existence at the stated time.

(2) Metropolitan counties are marked by \*. Greater London is not a metropolitan county but it is shown as if it were in those tables where metropolitan county data are included and in a number of additional tables.

(3) Poole was in the South West Economic Planning Region but had been included in the South East statistical region pending the report of the Local Government Commission in this area.

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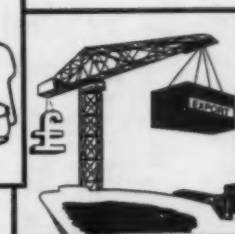
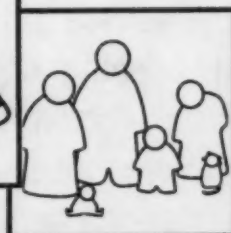
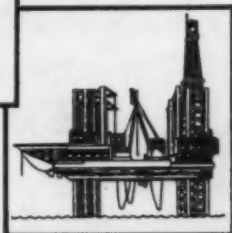
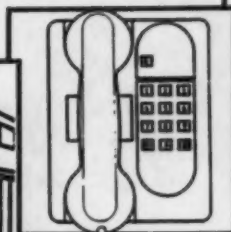
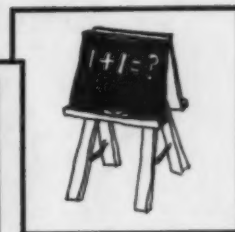
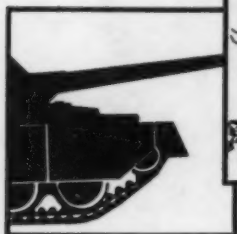


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